



# How To Remove Mould The Professional Way

A Guide To Being Mould Free

# Mould – Overview – Risks – Removal - Prevention

## Contents

Overview .....	2
What is mould?.....	3
Where can mould grow? .....	3
Conditions for mould growth .....	4
Controlling mould.....	4
The health effects of mould exposure .....	5
Who is most at risk from developing damp and mould related health issues? .....	5
DIY Mould Removal.....	6
If there is more than one square metre of mould in your property.....	6
What is mould remediation?.....	7
How much does mould remediation cost?.....	7
How to prevent mould growth .....	8
Condensation .....	8
A flood event.....	8
A leak or escape of water.....	8
Rising damp.....	9
Building defect or maintenance issues .....	9

# Mould – Overview – Risks – Removal - Prevention

## Overview

Mould in the home or workplace poses a very real health risk.

In 2001 the Housing Health and Safety Rating System (HHSRS) classified mould as a category 1 health risk, the same category as asbestos.

In this guide we explain:

- what mould is
- how it grows and the conditions that promote mould growth
- we highlight the health risks
- the steps necessary to remove and prevent or reduce further mould growth
  - identify the cause of moisture
  - fix the underlying moisture problem
  - clean and remove mould and mould damaged materials
  - dry the property
  - apply mould inhibitors

If you are experiencing serious mould problems contact the mould remediation specialists at [www.consultingdampservices.com](http://www.consultingdampservices.com)

# Mould – Overview – Risks – Removal - Prevention

## What is mould?



*Thousands of different moulds*

What we commonly call mould is a fungus, similar to mushrooms and yeast. There are thousands of different kinds of mould. It is rarely useful to identify the exact mould in a building because the treatment of all mould problems entails the same procedure.

Mould is only visible to the human eye when it has formed a large colony known as a *mycelium*. Unlike other forms of colonies a *mycelium* is an inter-connected network of strands known as *hyphae* rather than a series of individual organisms.

The largest known *mycelium* is in Oregon, an *armillaria ostoyae* that covers 2 400 square acres and is several thousand years old. Every *hyphae* in this *mycelium* is genetically identical.



*2400 acre fungus in Oregon*

## Where can mould grow?

Moulds in nature are expert recyclers, breaking down the materials that they grow on for food. This is fine in nature but can cause real problems in buildings. Mould eats the materials that it grows on, these digestive enzymes cause damage to the material.

3



*Extensive damage to wall*

The extent of this damage will depend upon the nature of the material. Softer materials such as plasterboard and wood can be structurally compromised through mould damage. Cosmetic damage and staining can occur on 'harder to digest' materials.

- Wood
- Plasterboard
- Paper
- Paints
- Adhesives
- Textiles

Mould cannot digest concrete and metal, but it can digest and grow on the dust, dirt and organic matter that accumulates on them.

# Mould – Overview – Risks – Removal - Prevention

## Conditions for mould growth

In order for mould to grow it requires suitable conditions and environment. Unlike plants and flowers mould does not require sunlight to grow, this is due to the way mould digests the materials that it grows on for food, and most moulds prefer the dark. Without the right conditions mould is not able to grow and spread, its spores may survive in a dormant state, waiting for the right conditions.

- **Food source** - mould can metabolise virtually any organic matter (containing carbon)
- **Oxygen** - moulds can grow in low oxygen environments
- **Temperature** - most moulds cannot grow below 3°C while the ideal temperature for the majority of moulds is between 18°C and 28°C
- **Moisture** - High humidity, condensation, water leaks and flooding all provide the moist conditions necessary for mould to grow



*Food*



*Oxygen*



*Temperature*



*Moisture*

## Controlling mould

If we are able to control any of the above elements we will be able to control the growth and spread of mould. Of the four elements required for mould growth the only element that we can easily control is moisture.

The source of moisture may result from poor ventilation, drying clothes on hangers inside the property, a recent flood incident, rising damp or an unidentified leak or maintenance issue. In any effort to remove mould from a property the underlying damp issue must also be addressed otherwise the mould will return.

The correct removal and remedy to mould problems is known as mould remediation. A professional mould remediation contractor will remove all traces of mould from the property and ensure that the damp issues have been corrected.



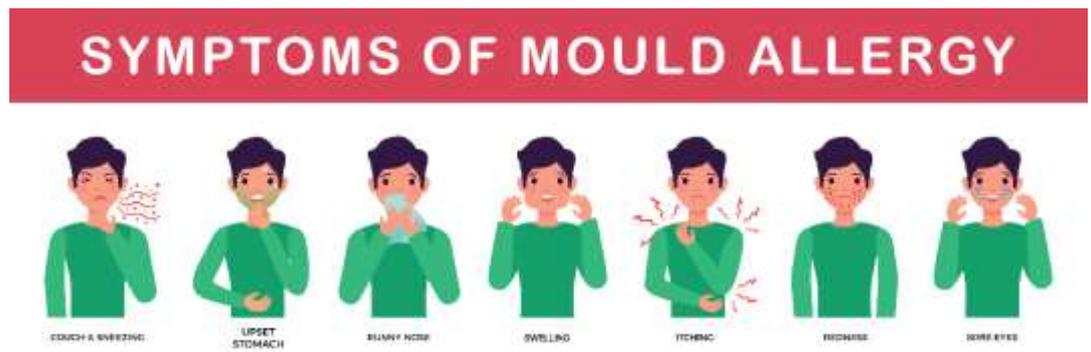
# Mould – Overview – Risks – Removal - Prevention

## The health effects of mould exposure

The Housing Health and Safety Rating System (HHSRS) class mould as a category 1 risk to health, the same category as asbestos. Moulds produce mVOC's (microbial volatile compounds) which are considered irritants.

Inhaling or touching mould spores may cause an allergic reaction or trigger an asthma attack. Indoor dampness and mould may not only aggravate pre-existing respiratory conditions, there is also (limited) evidence it may cause new symptoms.

- Sneezing
- Runny nose
- Irritated eyes
- Skin rash
- Unexplained nausea
- Breathing problems
- Tiredness
- Asthma attacks



## Who is most at risk from developing damp and mould related health issues?

5

Exposure to mould spores is unhealthy for everyone and should be avoided. However, there are certain groups of people who need to take extra precautions to avoid contact with mould because they're more likely to be sensitive to the allergens.

Many pregnant women and new parents are particularly concerned about the impact of mould on their children. Babies and children are more vulnerable to mould, so you should do all you can to tackle it.

According to the NHS, those groups of people more sensitive to allergens include:



*The elderly are a high risk group*

- Babies and children
- Elderly people
- Anyone with existing skin problems, such as eczema
- Anyone with respiratory problems
- Anyone with a weakened immune system

# Mould – Overview – Risks – Removal - Prevention

## DIY Mould Removal

Once you have identified and removed the source of moisture in your home you can remove small amounts of mould by using a mixture of 1 part bleach to 4 parts water (**Do not mix ammonia or any detergent containing ammonia with bleach. The combination forms a poisonous gas.**). This will kill the surface mould while an application of white vinegar will help to soak in and reduce further mould growth.



Only remove mould yourself if it's caused by condensation and covers an area less than 1 metre squared (1x1 metre or 3x3 feet).

Do not try to remove the mould yourself if it's caused by sewage or other contaminated water; call a professional mould remediation contractor.



Protect yourself from mould spores by wearing goggles, long rubber gloves and a mask that covers your nose and mouth. Open the windows but keep doors closed to prevent spores spreading to other areas of the house.

1. Remove and dispose of as much of the affected materials as possible
2. To help control airborne spores moisten the affected area with a light spray of the bleach/water mixture
3. Fill a bucket with the bleach/water mix and soak a rag. Gently wipe the mould away careful not to brush it as this can release spores into the air
4. Once the mould has been removed dry the area by dabbing with a dry cloth
5. Place all cleaning equipment rags etc. into a plastic bag and dispose of in the regular rubbish bin
6. White distilled vinegar can be sprayed onto the affected area and left to dry naturally



*Gently wipe*



*Distilled white vinegar*

If there is more than one square metre of mould in your property

If your mould problem is too big for you to tackle or you have not identified the source of moisture, call a mould remediation contractor. If you visit our website at [professionalmouldremoval.co.uk](http://professionalmouldremoval.co.uk) our team of experts will help you deal with your mould problem in a professional and friendly manner.

Do not delay, mould growth if left unchecked can be hazardous to your health and cause damage to your property.

# Mould – Overview – Risks – Removal - Prevention

## What is mould remediation?

Mould remediation is the process of identifying, removing and preventing mould problems.

If you have mould growing in your property it is a sign of an underlying damp issue. This damp issue could be from one of the following:

- An unidentified leak
- Improper drying after a flood
- Rising damp
- Inadequate ventilation
- Building defects or maintenance issues



*A common cause of mould growth*

Proper mould remediation will not only remove visible mould but also correct the underlying damp condition. Mould remediation should be conducted by a mould remediation specialist trained to industry standards. The key to a successful mould remediation programme is to identify and correct the underlying damp issue. This process may entail leak detection, thermal imaging surveys, removal of plasterboard or kitchen cabinets. A mould inhibitor will be applied after drying.

The removal of mould is conducted under strict containment conditions utilising specialist equipment, this includes:



*Professional mould remediation*

- Forming critical barriers to prevent the spread of spores to non-affected areas of the property
- The use of negative air pressure to prevent the spread of spores
- HEPA vacuums and filters
- Air scrubbers fitted with HEPA filters
- Moisture meters
- Full PPE for all workers
- Surface clearance testing
- Air quality testing

## How much does mould remediation cost?

Mould remediation is conducted under strict containment conditions with highly trained technicians utilising specialised equipment. Mould remediation may be covered under your buildings insurance policy if the mould is a result of a covered peril, such as a water leak or flood. The cost of properly conducted mould remediation will run from several hundred to several thousand pounds depending on the nature and scale of the problem.



*Strict containment conditions*

It is false economy to hire contractors to come and clean mould from your property without identifying the underlying cause. If you are looking for a contractor for mould remediation be sure to ask them the following questions:

- What is their process?
- What equipment will they be using?
- What containment measures will they be taking?
- Will they identify the damp problem?

# Mould – Overview – Risks – Removal - Prevention

## How to prevent mould growth

In order for mould to grow it requires a food source, oxygen, mild to warm temperatures and moisture. If we are able to control any of the above elements we will be able to control the growth and spread of mould. Moisture is the easiest element to control. If the source of moisture is removed mould growth will be greatly reduced or stopped altogether. After the source of moisture has been identified and fixed mechanical drying with dehumidifiers and air movers will usually be necessary to remove excess moisture.

A professional mould remediation contractor will be able to identify and remedy the underlying moisture problem before mould removal begins.

The main sources of moisture that promote mould growth are:

- Condensation
- A flood event
- A leak or escape of water
- Rising damp
- Building defects or maintenance issues



*Condensation*

## Condensation



*Use a vent hood*

Condensation is the most prolific source of moisture available to mould. Showers, tumble dryers, cooking without lids on pots and drying clothes indoors are all major condensation producers. The effects of these can be mitigated by the installation of mechanical ventilation to remove excess moisture; putting lids on pots; using the vent hood over the hob/range; venting tumble dryers outside of the property.

## A flood event

After flooding mould begins to grow immediately. Proper drying and disaster management are required to prevent mould growth.



*Flooding provides ideal conditions for mould growth*

## A leak or escape of water



*Leaking pipes a common source of moisture*

Leaks may go unnoticed for weeks or months especially if the pipe is buried in concrete or behind plasterboard. Water ingress from faulty guttering or a damaged roof can be difficult to identify and may require a leak detection specialist. After the leak has been fixed, drying will be required after mould remediation.

# Mould – Overview – Risks – Removal - Prevention

## Rising damp



*Rising damp due to failing DPC*

Rising damp can occur due to the Damp Proof Course (DPC) failing. This is seen in many Victorian properties where settlement has caused the slate DPC to move or break. Many rising damp issues can be remedied with an injected DPC, or a liquid Damp Proof Membrane (DPM) if moisture is coming up through a concrete floor.

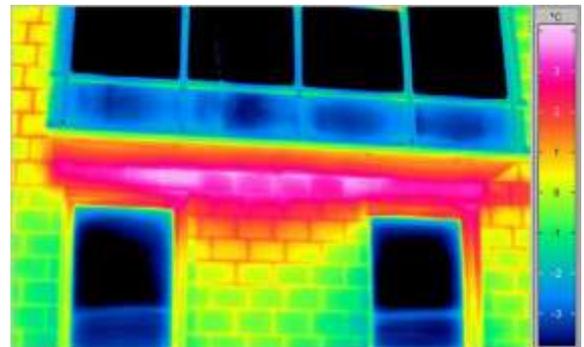


*An injected DPC being applied*

## Building defect or maintenance issues

Building defects can be identified as: Cold bridging contributing to condensation, trickle vents in windows not present or blocked, missing insulation causing cold spots and condensation; poor pointing in brickwork; lack of proper ventilation especially in high humidity areas such as bathrooms and kitchens.

Once identified all building defects or maintenance issues can be fixed by a qualified and experienced contractor.



*Cold bridging causing condensation*