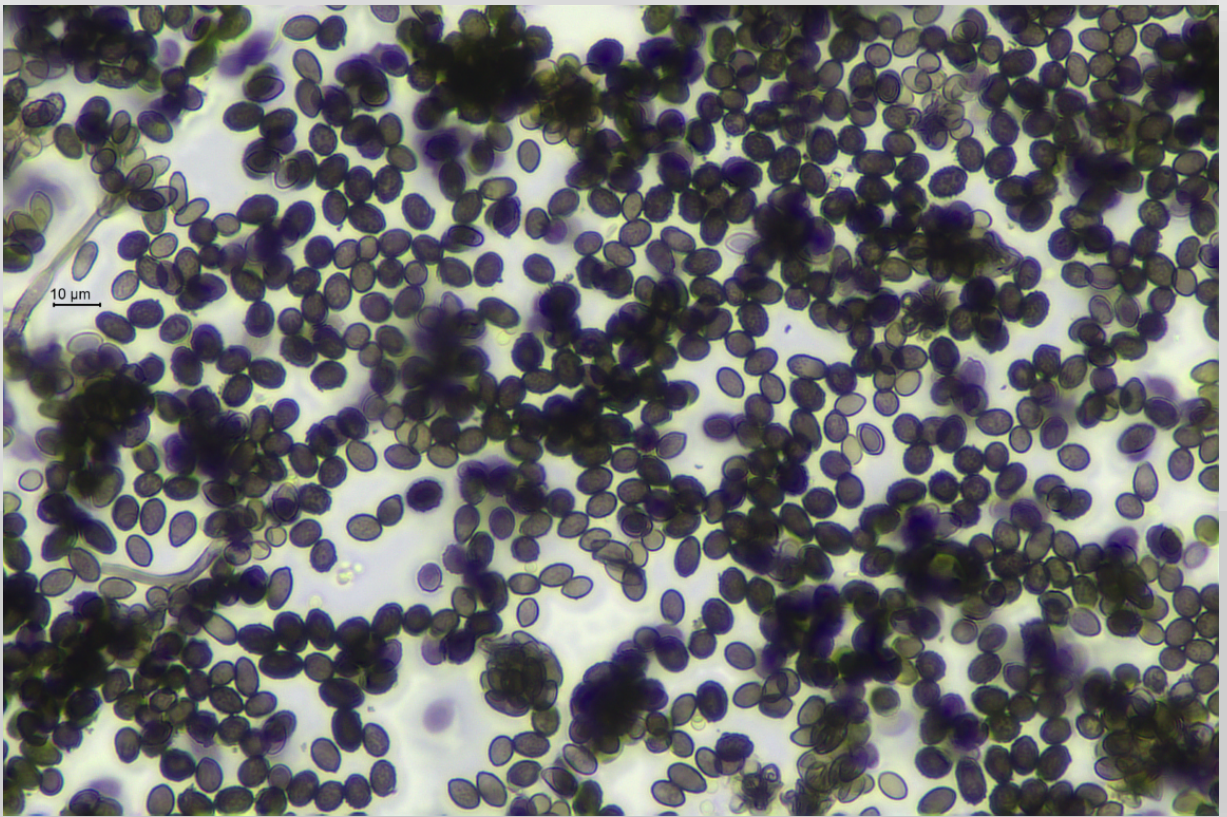


MASTERING MOULD

Essential Questions Answered to Safeguard your Health and Home





Foreword

Mould—it's a word that often sparks concern, frustration, or even fear. Whether it's a small patch in the corner of a bathroom or a persistent smell you just can't pinpoint, mould is a problem that many households and workplaces face. This book is here to answer the most common questions people ask about mould, from understanding what it is and why it grows to figuring out how to remove it and prevent it from coming back. Mould can affect more than just the look of your home or workplace—it can impact your health, damage your property, and lead to costly repairs if left unchecked.

The key to controlling mould is knowledge. When you understand how mould works and what it needs to grow, you can take effective steps to stop it in its tracks. That's why this book is structured around the most frequently asked questions about mould. Each chapter dives deep into a specific topic, giving you practical insights and strategies you can use right away. Whether you're dealing with a small mould issue or looking to prevent one altogether, this guide will equip you with the tools you need to protect your health, home, and workplace. By the end, you'll not only have answers to your questions—you'll have the confidence to tackle mould problems with clarity and confidence.

What is Mould, & Why Does It **Grow Indoors?**



Mould is a type of fungus that thrives in damp, humid, and poorly ventilated environments. It reproduces through microscopic spores that float in the air and settle on surfaces. When these spores land in areas with the right conditions—moisture, warmth, and organic material—they grow into visible colonies. Common indoor mould culprits include leaks, condensation, poor ventilation, high humidity, and flooding.

Mould isn't picky; it grows on a wide range of surfaces, from wood and plasterboard to carpets and even dust. The key to preventing mould is addressing its primary driver: moisture. Without moisture, mould cannot grow.

How Can I Tell If I Have Mould in My Home or Workplace?



Mould isn't always easy to spot. While visible patches of black, green, or white discolouration are obvious signs, mould often grows in hidden areas, like behind walls, under carpets, or inside heating and cooling systems.



Other signs of mould include a persistent musty smell, peeling or bubbling paint (water damage), or unexplained health symptoms like allergies, coughing, or headaches.

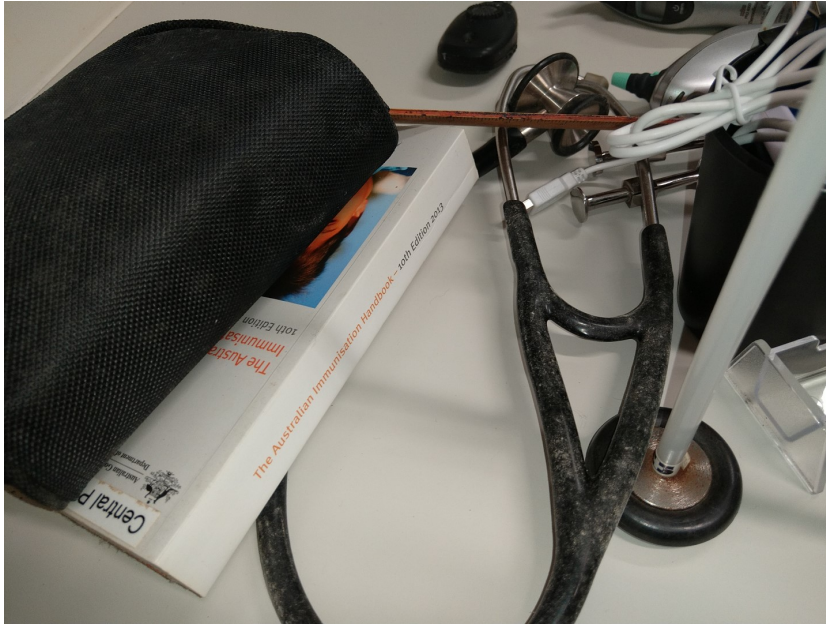


If you notice any of these, **inspect your space thoroughly or consult a professional for testing.** Mould can be deceptive, growing in places you might never think to check.



Professional consultants utilise a range of equipment and techniques to identify mould problems and determine solutions including building material moisture testing, scanning (non-destructive) moisture meters, thermal imaging, airborne mould testing and surface mould testing.

Is Mould **Dangerous** to My Health?



Yes, mould can pose significant health risks, particularly for people with allergies, asthma, or weakened immune systems. Even healthy individuals may experience symptoms like coughing, sneezing, skin irritation, or respiratory issues when exposed to mould for extended periods.

Certain types of mould, like black mould (*Stachybotrys chartarum*), have gained a reputation for being particularly harmful, but all mould should be treated seriously. Long-term exposure to mould can lead to chronic health issues, so addressing it promptly is essential for protecting your well-being.

How Do I **Safely** **Remove** Mould?

If you're dealing with a small amount of mould (less than 1 square meter) you may be able to effectively tackle the problem yourself. The first step is to identify and address the source of moisture to prevent regrowth, whether that be lack of ventilation or a leak. For larger problems or wet porous materials such as plasterboard and carpet, professional assistance may be needed.

If you decide to clean the visible mould yourself, use personal protective equipment to reduce personal exposure risks. As a minimum this should include gloves, a N95 mask and goggles. Use a microfibre cloth folded into quarters that can be unfolded when each side has become loaded. You can use a cleaning solution of your choice, however avoid using oil based products as they may leave a residue behind. If using a cleaning solution it is important to understand the risks associated with it, its limitations and its proper uses.



01

Make sure the area is well ventilated to reduce the exposure of airborne mould spores and cleaning fumes.

02

Apply the solution and let it sit for a few minutes. Then scrub the area and rinse/wipe down with clean water.

03

After cleaning, ensure the area is thoroughly dried and continue to ventilate as much as possible.



How Can I **Prevent** Mould from Coming Back?

Preventing mould from coming back requires controlling the main factor that encourages its growth: moisture.

Here are key steps you can take to stop mould from reappearing in your home or workplace:



- 01. Fix Leaks and Water Damage:** Quickly repair leaks in your roof, walls, or plumbing to prevent water from seeping into your home.
- 02. Improve Ventilation:** Increase airflow in damp areas like bathrooms and kitchens. Use exhaust fans or open windows to allow air to circulate and reduce humidity levels. Consider installing a dehumidifier in areas prone to excess moisture.
- 03. Clean and Dry Damp Areas Promptly:** If any areas in your home become wet from spills, floods, or high humidity, clean them up immediately. Dry carpets, upholstery, and walls within 24 to 48 hours to prevent mould growth.
- 04. Regular Maintenance:** Regularly inspect areas prone to dampness, such as the subfloor, to catch moisture problems before they become mould issues.

How do I **stop** mould as a renter?

As a renter, your landlord is responsible for providing a property that is free from mould and dampness. If mould develops during your tenancy due to a property defect—such as existing water leaks or wet building materials—it's the landlord's obligation to address the problem. Additionally, if mould appears soon after you move in, it could be considered a pre-existing issue.

However, you could be held responsible for mould removal costs if you don't take reasonable steps to prevent mould during your tenancy. To avoid this, follow preventive measures like wiping down condensation from windows with a microfibre cloth, using the bathroom exhaust fan while and after showering, and regularly cleaning bathroom tiles.



If you notice mould forming, notify your landlord or real estate agent promptly, and keep a record of all correspondence on the matter for reference.

What should I do **after flooding?**

Floods and storms can lead to standing water around and inside your home, creating ideal conditions for mould growth. Mould can start to grow after just 24 to 48 hours. If you return home after a flood and notice water damage, visible mould, or a musty smell, it's important to act quickly to clean up and dry out your home in order to minimise mould growth. Before starting the clean-up, contact your insurance company to review their mould policy to ensure you don't inadvertently void any coverage, and take detailed photos, videos, and notes of the damage.

To reduce the risk of mould after flooding, you should (where safe to do so):

- Open all windows and doors to allow natural ventilation and airflow.
- Remove any standing water from inside and around the home.
- Relocate wet or flood-damaged items, particularly absorbent materials like carpets, rugs, mattresses, bedding, clothing, wallpaper, or any other items that can't be adequately cleaned and dried, to a shed or garage until your home insurance claim is processed.
- Remove and dispose of wet plasterboard and insulation to help the internal walls dry out properly.
- Clean, disinfect, and dry hard surfaces such as floors, walls, countertops, ceilings, and wall studs.
- Once safe power is restored, use fans and dehumidifiers to thoroughly dry the house.

What should I do **after flooding?**



Remember that floodwaters can be dangerous due to contamination with sewage, chemicals, and harmful bacteria, which can lead to infections and diseases. Additionally, floodwaters can weaken buildings, leading to structural damage. For these reasons, it's crucial to avoid direct contact with floodwater and seek professional help for clean-up and remediation.

Conclusion: Partnering with Professionals for Long-Term Solutions



Mould isn't just a nuisance—it's a threat to your health and property that requires a proactive, informed approach. While this book provides some of the knowledge and tools you may need to tackle small mould problems, it's important to know when to call in a professional.



If you suspect a hidden mould problem, notice extensive growth, or experience recurring mould despite cleaning, don't take chances. Engage a qualified professional like a Keystone Environmental Consultant to test and assess your home or workplace. We can pinpoint the source of the problem, determine the extent of the mould damage, and recommend the right course of action.



The key to a successful restoration is not only remove visible mould and water damaged materials, but also address the root cause—ensuring the problem doesn't come back. Investing in professional help can save you time, money, and unnecessary health risks in the long run.



Mould can be a challenge, but with the right knowledge and support, you can protect your environment and breathe easier. Now that you're armed with the facts, take action—and don't hesitate to seek professional guidance when you need it.

The Professional Mould Remediation Process:

Professional mould remediation involves a thorough, systematic approach to safely remove mould and prevent its return. The process begins with a comprehensive inspection, where experts assess the extent of the mould issue and identify the moisture source using specialized tools like moisture meters and infrared cameras. Once the problem areas are identified, the affected zones are contained using plastic sheeting and negative air pressure to prevent the spread of spores to other parts of the property.

The restorers wear personal protective equipment (PPE), such as respirators, gloves, goggles, and protective clothing, to ensure their safety during the removal process. In cases where porous materials, such as plasterboard or insulation, have absorbed moisture, they may need to be removed and replaced, as mould can penetrate these materials deeply, making complete removal difficult. The remaining affected materials are then remediated using specialised tools like HEPA vacuums and then the materials are cleaned and disinfected. The surrounding area is then thoroughly cleaned, sanitized, and dried using high-powered fans, dehumidifiers and HEPA filtered air scrubbers. A final inspection by an indoor environmental professional (IEP) ensures the area is dry and mould-free, which can include mould testing to confirm that no harmful spores remain.



About the Author



Bryan Jepsen is the founder and director of Keystone Environmental Pty Ltd, a company he established in 2020 to pursue his passion for creating healthier indoor environments. With over a decade of experience in the environmental services industry, Bryan has built a reputation for his expertise in HVAC systems, indoor air quality, and mould remediation. His work focuses on delivering practical solutions to ensure safe and healthy built environments for homes and workplaces.

A graduate of the Australian College of Environmental Studies, Bryan holds a Certificate IV in Building Biology. Over his career, he has partnered with pharmaceutical manufacturers, forensic science services, and government departments to resolve complex environmental challenges. He is also the President of the Indoor Air Quality Association (IAQA) Australian Chapter and serves on the committee of the Australasian Society of Building Biologists (ASBB). As a certified Fitwel Ambassador, Bryan is committed to advancing health and well-being through building design and performance strategies. Bryan's work is driven not just by expertise but by a personal passion for improving indoor environments. When he's not on the job, Bryan is a devoted father who enjoys spending time with his family. His favourite pastimes include camping, sim racing, and indulging his love of chocolate.

Based in Brisbane, Bryan leads Keystone Environmental in providing services across Australia, New Zealand, and Southeast Asia.