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This paper provides details of our two separate and very different mould decontamination services. The first is a relatively low-cost risk reduction process and the second is the industry gold standard on air decontamination for medically safe requirements as per www.Survivingmold.com

Option 1 Mould control and health risk reduction by Building Forensics

This process is aimed at the reduction of exposure to health hazards and risk factors.

In the following process, our goal is to reduce exposure to airborne contamination which trigger immune response of susceptible people at an affordable cost.

Target contaminates

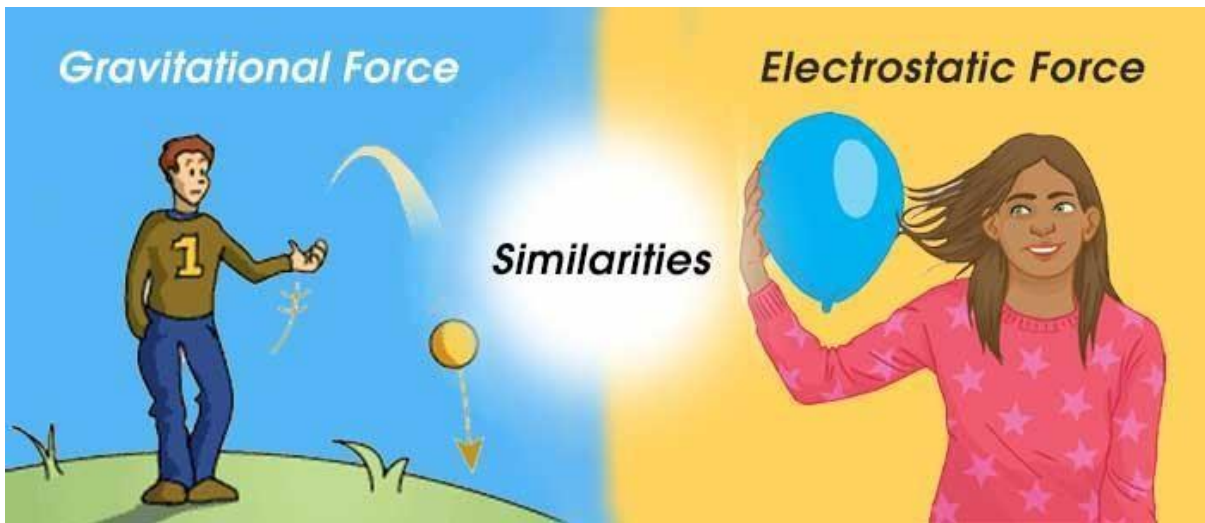
- Gram Positive and Negative Bacteria
- Endotoxins
- Mycotoxins
- Mould Spores and fragments

Procedure

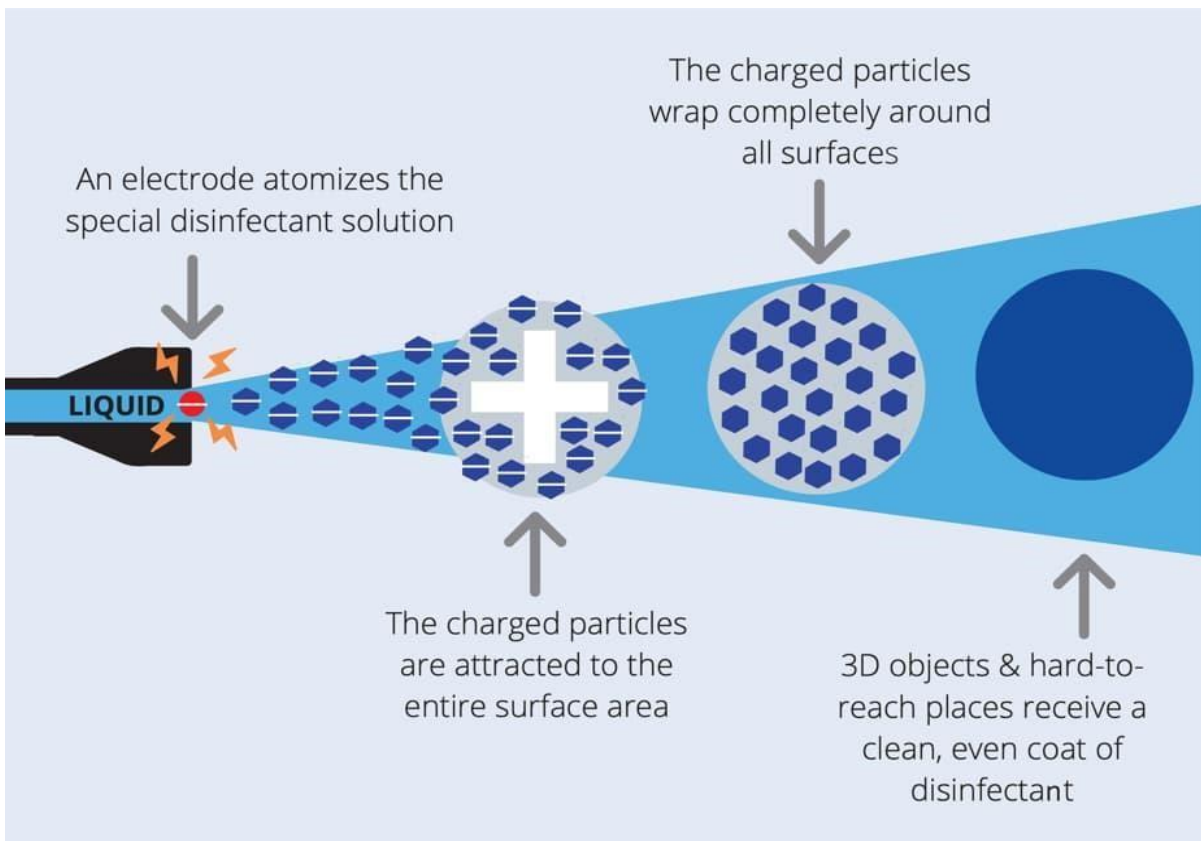
Fill the affected areas with a Bio Aerosol oxidising disinfecting agent resulting in the oxidisation or denaturing of contaminates on surfaces and air, thereby reducing exposure risk.

- Fill the air with a Bio Aerosol which is electrostatically charged causing conglomeration air cleaning
- Application of a cationic Bio stat dry film to lock in residue contamination which also provides surface protection.
- Particle counts pre and post treatment to prove efficacy.
- Use pre and post treatment spore counts (if required and at extra cost).
- Provide pre and post verification complying to international standards of risk reduction at extra cost due to delay prior to sampling.

We use chemistry and physics to produce chemicals and application systems that cover and bind to surfaces to offer the best protection.



Here we see the two different forms of natural force. Unlike most other chemicals our treatment is attracted to all surfaces not just the floor.



In this diagram we show how our disinfecting and the biostatic misting deposits on all surfaces to provide even greater protection.

Disinfection Type	Electrostatic spray	Fogging	UV disinfection
Wet or dry	Dry	Wet	Dry
Disinfection period	1-5 minutes	30 -40 mins	30+ mins

Note UV light disinfection requires direct light exposure and only areas exposed to the light are disinfected.

The biocidal microbe shield we apply is unique anti-microbial technology which has been used and tested for over 30 years and is an accredited BIOCIDE with the Environmental Protection Agency and comparable regulatory bodies around the world. This technology has been used in hospitals for the wound area of surgical drapes etc. The product is used in leading clothes retailers such as NIKE and M&S as odour control (bacteriostat) in their products

This is not a onetime kill as often stated with bleach, but a continuing ongoing bacteriostat and mould control product. adhering as a dry film to surfaces

Medical Note

Effectiveness of medical treatment for symptoms associated with mould, chemical inflammagens, and bacteria should initially focus on the removal of the triggers and source of moisture eliminated.

It is unlikely that medical treatment will be as effective as possible if there is a continuing exposure, therefore some form of decontamination and exposure reduction must be seen as essential and of course beneficial. This is risk reduction

Typical action and control results

The Biostatic film is carried by a silane type product, which chemically bonds to all surfaces and provides long lasting protection against the following moulds and bacteria:

Mould/Fungi protection

Aspergillus niger
Mucor sp.
Aspergillus fumigatus
Tricophyton mentagrophytes
Aspergillus versicolor
Tricophyton interdigitalie
Aspergillus flavus
Trichoderma flavus
Aspergillus terreus
Chaetomium globusum
Penicillium chrysogenum
Rhizopus nigricans
Penicillium albicans
Penicillium humicola

Cladosporium herbarum
Penicillium citrinum
Aureobasidium pullulans
Penicillium elegans
Fusarium nigrum
Penicillium funiculosum
Fusarium solani
Penicillium notatum
Penicillium humicola
Gliocladium roseum
Penicillium notatum
Rhizopus nigricans
Oospora lactis
Penicillium variabile
Stachybotrys atra

Algae

Oscillatoria borneti LB143
Schenedesmus quadricauda
Anabaena cylindrica B-1446-1C
Gonium sp. LB 9c
Selenastrum gracile B-325
Volvox sp. LB 9
Pleurococcus sp. LB11
Chlorella vulgarus

Yeast

Saccharomyces cerevisiae
Candida albicans

Bacteria

Micrococcus sp.	Streptococcus faecalis
Mycobacterium smegmatis	Haemophilus suis
Staphylococcus epidermidis ¹	Escherichia coli ATCC 23266
Mycobacterium tuberculosis	Lactobacillus casei
Enterobacter agglomerans ¹	Escherichia coli ¹
Brucella canis	Leuconostoc lactis
Acinetobacter calcoaceticus ¹	Proteus mirabilis
Brucella abortus	Listeria monocytogenes
Staphylococcus aureus (pigmented) ¹	Proteus mirabilis ¹
Brucella suis	Propionibacterium acnes
Staphylococcus aureus (non-pigmented) ¹	Citrobacter diversus ¹
Streptococcus mutans	Proteus vulgaris
Klebsiella pneumoniae ATCC 4352	Salmonella typhosa
Bacillus subtilis	Pseudomonas cepacia
Pseudomonas aeruginosa	Salmonella choleraesuis
Bacillus cereus	Pseudomonas fluorescens
Pseudomonas aeruginosa ¹	Corynebacterium Boris
Clostridium perfringens	Xanthomonas campestris
Pseudomonas aeruginosa PDR-10	Vancomycin Resistant enterococci
Haemophilus influenzae	Methicillin Resistant Staphylococcus aureus

Benefits of this protocol

This treatment usually completed in a day, provides almost instant exposure reduction. Surfaces are dry within an hour or so and fragments and spores are generally locked in. Air particle counts confirm success as compared to pre and post treatment levels.

This protocol is not designed as a substitute for professional remediation and clients are advised to invest in a professional inspection. The clear benefits are however immediate, and current exposure risks will be substantially reduced or eliminated and future growth potential will be limited or eradicated if environmental conditions are controlled.

Benefits

- We use biocide and disinfection products with internationally known and recognised capabilities to achieve objectives.
- We use application technology known to provide the coverage and homogenous protection required.
- We guarantee we will prove major reduction in exposure.
- Our claims are supported by various public body attestations including hospitals, all available to clients.
- Significant results can be verified by compliance with British Standards of mould measurement reduction and reduction in air particle counts as identified with a 6-channel particle counter
- Nobody in the world can categorically state your health will improve after any form of decontamination, whatever the cost.

Cost & result Comparisons

Comparisons	Professional Decontamination	Building Forensics Risk reduction process
Cost	£50,000 plus	Less than £1500
Time frame	6 months plus	Less than 1 day
Long term protection	No	Yes
Active control	No	Yes
Removal of contaminates	Yes	Part only but locked down
Removal of all inflammagens	Unknown	Proven reduction in allergens
Reduction of exposure	Yes	Yes
Decontamination guarantee	No	No
Disposal of all contents	Usually,	No
Methodology	Intrusive investigation and exposure of all possible water damage and reservoirs	Not required as system is a control process, but some continuing but limited leakage may occur
Verifiable results	Yes at great cost	Yes risk reduction verification at low cost

Notes

- According to Institute of Medicine there can never be guarantees of successful decontamination.
- Success is considered when occupants no longer react to the building environment.
- Locked down refers to surface electrostatic attraction thereby reducing airborne inhalation (exposure risk).
- There is no alternative to professional decontamination and severely immune compromised clients may have to consider this and weigh benefits against cost issues.
- Following the risk control process and application of biostat, mould cannot re grow if the environment is controlled

Option 2 Air Scrub with Aerosolver

This air scrubbing process is recognised and promoted by Dr Shoemaker and SurvivingMold.com for fine particle cleaning. In this process we fill the air of target areas with a hydrophilic salt solution applied with a sweeping motion. The solution encompasses particles, and we add another solution to the air to be absorbed into the salt making the shrouded particle too heavy to remain airborne. The contamination falls to the ground where a sacrificial temporary glycerine film forms to lock down the particles.

The client has 4-5 days to wipe clean all surfaces with an alcohol wipe to dissolve the microfilm and remove fallen particulates. We recommend the client undertakes the clean up to contain costs and most importantly monitor effectiveness

You can see more details on www.airscrub.co.uk

End

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