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## Toxic Mould and its Effects on Clients

**Eric Stokes**  
University of Salford  
School of Construction & Property Management

Presented by **Dr Angela Lee**  
University of Salford

   
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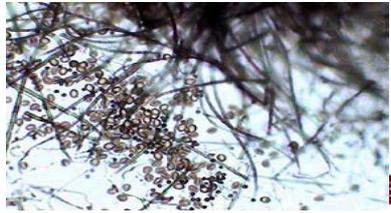
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- **'Toxic Mould'** – a media term that made a UK debut in early 2003
- Correct name – **Stachybotrys chartarum**
- Tremendous reaction in the USA where \$billions are at stake from insurance claims and litigation

   
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- **So - what's the problem?**
- They're only small but they are causing a lot of trouble...



**Stachybotrys mycelium**

   
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### Salford's study – 2003/4

- Regionally : City of Salford is part of Greater Manchester - in NW England
  - Population economic demographic is very wide - from the very wealthiest to severely disadvantaged
- Housing standards display exactly similar economic variations
  - Region has many housing associations and Local Authorities with social housing responsibilities

   
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### Salford's study – 2003/4

- Survey engaged 24 housing professionals with combined responsibility for over 25000 properties – houses and HMO's – in north west
  - Striking results obtained demonstrating lack of understanding of human reaction to exposure to fungal mycotoxins

   
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### Salford's study – 2003/4

- Results confirmed :
  - Most would not recognise *Stachybotrys chartarum* if confronted with it
    - Most would not understand the risks associated with this particular fungi
      - There are serious health and safety risks for personnel surveying contaminated property
  - Limited understanding of risk management of the total process of surveying existing property
    - No strategy currently in place for either training personnel or providing personal protection

   
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## Salford's study – 2003/4

- **The hidden menace...**
- S. atra (Stachybotrys chartarum) gives off minute spores when disturbed
  - They are invisible to the eye and if sufficient in quantity look just like 'smoke'
    - Easily ingested and those exposed experience a variety of conditions e.g. sneezing, coughing, nausea, headaches ... or worse

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## Salford's study – 2003/4

- Appearance of S. atra is like a **green-black** coating on surface of materials containing cellulose – especially wallpaper
- Easily discounted as being "...just mildew..." and not really a hazard
- Suggestion now that this may be a problem similar to asbestos...



S. atra on wooden worktop

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## Moulds & S. atra

- Construction team interests are normally
  - 'Dry' rot & 'Wet' rot
    - Most dangerous is perceived as being dry-rot...
- However – S. atra grows easily in almost any damp, still & relatively warm conditions



Growth around a/c vent

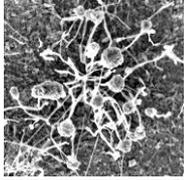
 

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## Established Growth Conditions – S. atra

- Ideal conditions are - Cellulose material, 95% Relative Humidity & between 0° C & 25° C



S. atra mycelium (2300x mag)

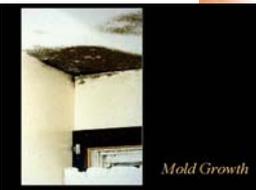
 

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## Cases:

- Cleveland, Ohio infant cases 1993-1994
- Stachybotrys chartarum is identified
- Dangers from Infant Pulmonary Haemorrhage (IPH)
- Stachybotrystoxicosis identified



Mold Growth

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## Is this the new asbestos ?

- Dangers for very young and the elderly
- Reaction following exposure varies according to :
  - Age, condition, and medical history
  - Asthmatics may be especially at risk – asthma cases are now up 75% since 1980

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### Impact on construction industry

- Will affect all members of the industry
  - Contractors, consultants and clients
- No escape - especially landlords with mould affected property 'to let'
- Potential for high insurance claims if mismanaged or misidentified
- Damages claims by employees suffering from mycotoxin poisoning

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### Salford's study – 2003/4

- Identified as being particularly at risk were:
- Council tenants in 60's build high-rise flats (due to poor insulation & ventilation)
- Residential care-homes (due to high humidity & temperature levels)
- Hospitals (some areas experience the above conditions)

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### Some conclusions:

- Better training and understanding among personnel exposed to or responsible for managing this hazard
- Public awareness campaign for combative procedures
- Cleanliness in 'caring' environments
- Research is ongoing at Salford

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### Contact:

- The author welcomes contact and collaboration in this field of research
- Please contact:
- E.stokes@salford.ac.uk

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