

Background



For a deleading operation, a company wants to use old premises for its cantonments. Strong evidence for the presence of mould.

Intervention of the LBC for assistance



- Inspection of the premises: observation mouldy areas and extensive contamination.
- Sampling surface to objectify the fungal nature.
- Audit building for research origin of moisture and technical solutions to solve them.

Conclusions

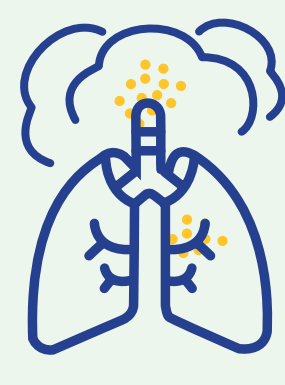
- Observation of the presence of mold in 2 of the 4 parts concerned.
- Identification (microscopy + molecular) of *Stachybotrys chartarum*, *Gliomastix (murorum)*, several *Penicillium* and *Doratomyces (stemonitis)*,
- Possible exposure of workers present in this environment to VOCs emitted, to spores, mycelium, other by-products of the mold growth,
- Possible effects on the health of workers by contact or inhalation:



allergy



irritations



possible infections

Recommendations

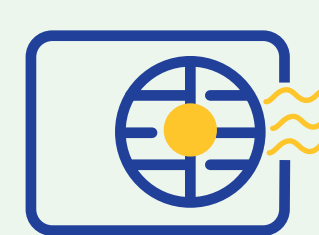
Before workers use the quarters:



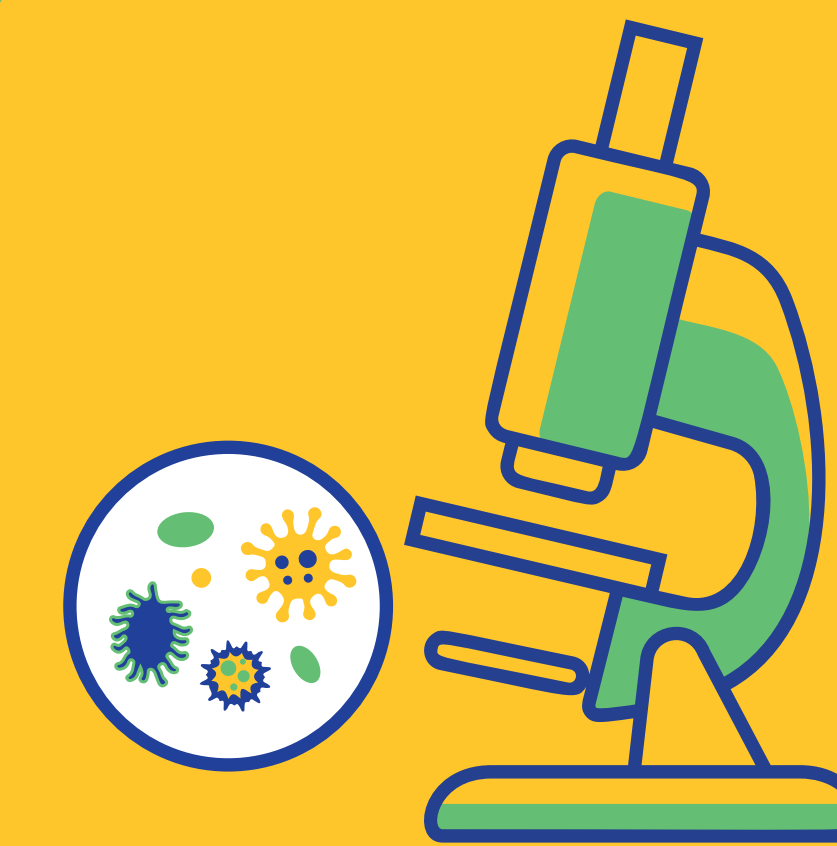
- Look for sources of moisture and solve problems
- Stop any spreading of moulds: isolate the contaminated parts from uncontaminated



- Ventilate and dry the wet parts
- Clean without dispersing moulds
- Adjust the cleaning procedures: methods, products, waste management, and PPE



- Return the premises in good state and install a ventilation
- Maintain good hygiene.



FUNGAL CONTAMINATION OF WORKERS' QUARTERS: OBSERVATIONS AND RECOMMENDATIONS

Example of assistance by Biocontaminants Laboratory (LBC) of Cramif

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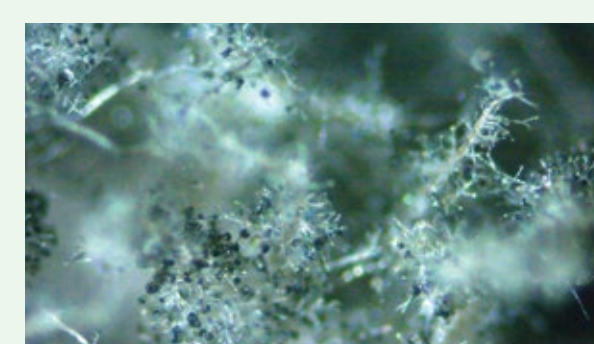
Localisation



Identification of the main mould (not exhaustive)

Part # 1
(Future refectory)

- *Stachybotrys chartarum*
- *Gliomastix murorum*
- *Penicillium spp*



Stachybotrys chartarum
binocular loupe (x40)
- following culture and isolation



Stachybotrys chartarum
culture and isolation
on MEA medium

Part # 2
(Future decontamination
area - deleading operation)

- *Stachybotrys chartarum*
- *Gliomastix murorum*
- *Penicillium spp*
- *Doratomyces stemonitis*
- *Cladosporium sp.*



Doratomyces stemonitis
microscopy after culture
and isolation (x400)



Penicillium sp.
microscopy after culture
and isolation (x1000)