Tackling Damp and Mould

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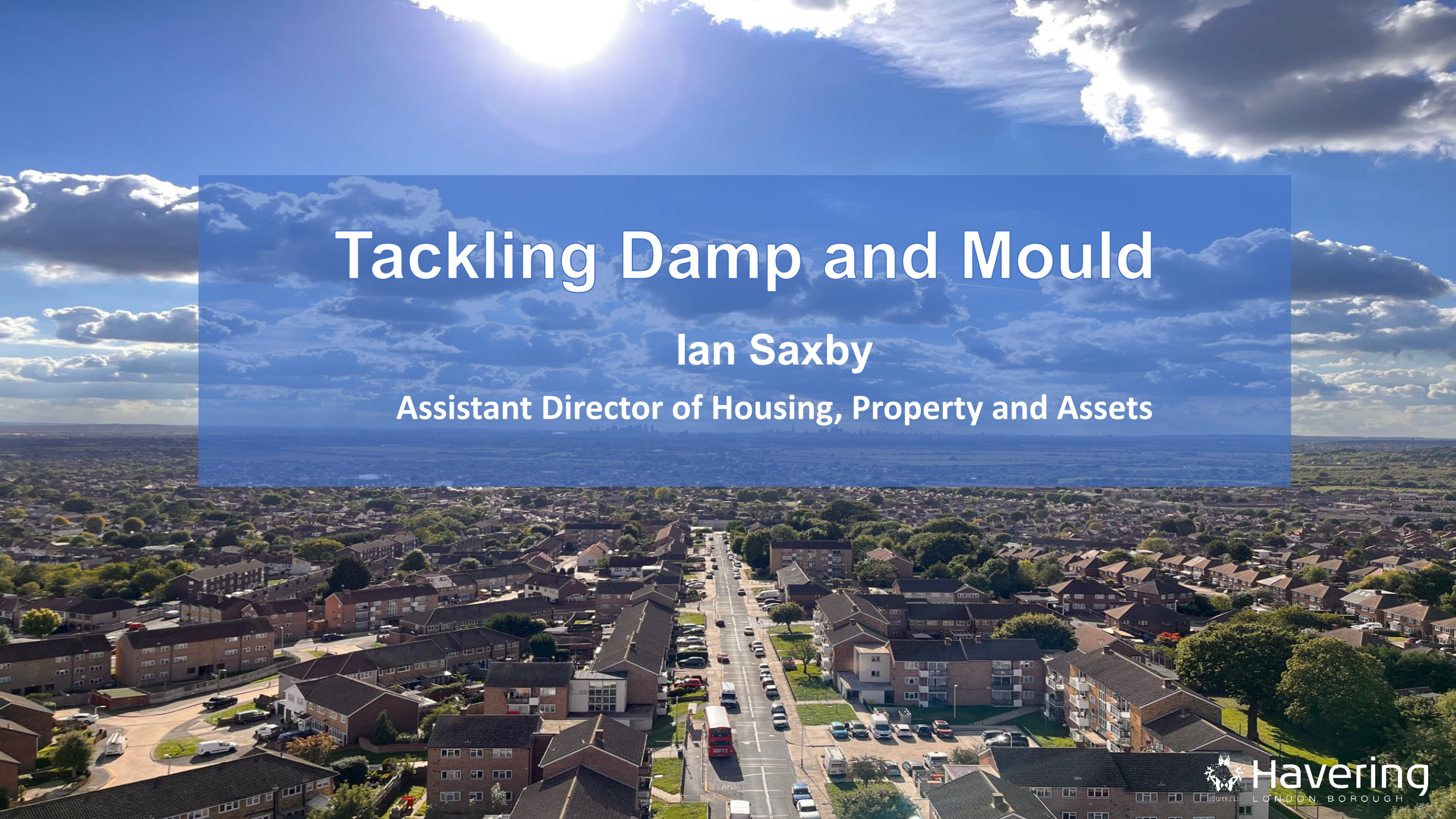

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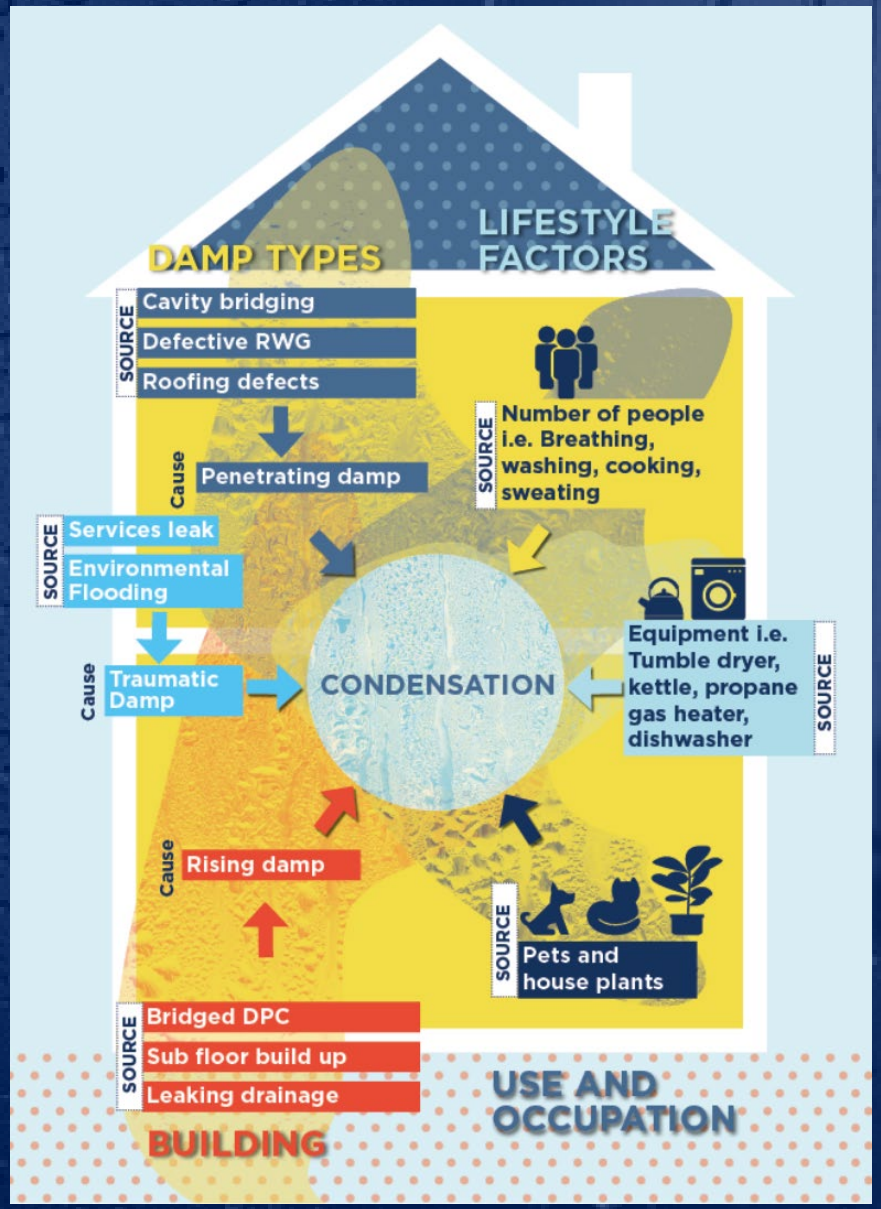
Why do we get damp and mould?



The are many reasons that we might get damp and mould in properties in Havering. Some of which include:

- Building Defects (roofs, walls, floors etc.)
- Environmental Issues (flooding etc.)
- Lifestyle issues (washing, cooking, drying clothes etc.)
- Overcrowding
- Type of property (cold bridging, single glazing etc.)

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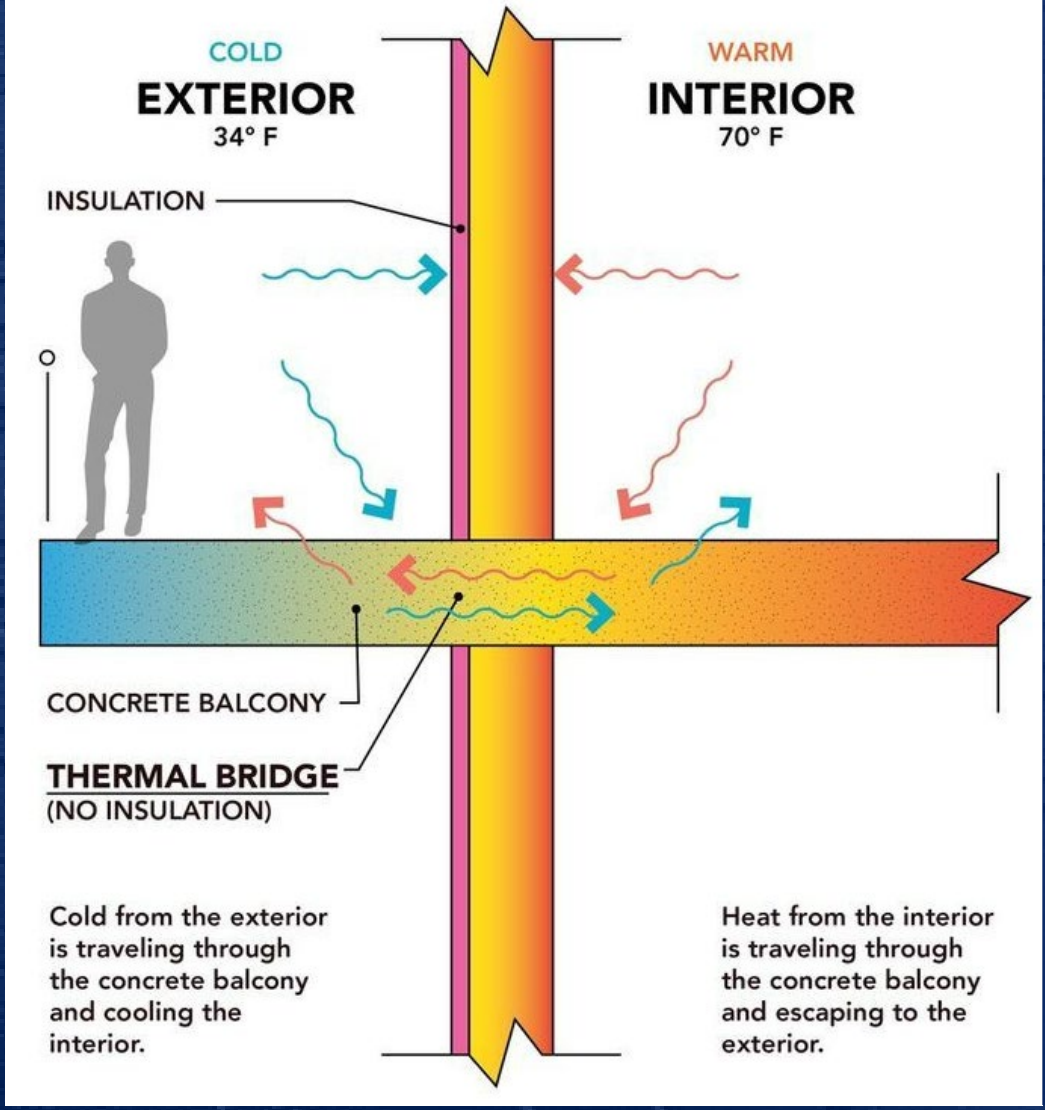

The London Borough of Havering housing stock is comprised of a large number of dwellings constructed in and around the 1960's.

Dwellings constructed in this period where not subject to current building regulations and therefore lack the thermal values of modern construction.

This presentation will discuss some of Havering's common archetypes highlighting the building deficiencies that create cold bridging leading to damp & mould within Havering's housing stock.

A cold bridge is an area that lacks thermal insulation creating a colder surface area within a dwelling, this area will be at a far greater risk of condensation.

The following archetypes slides will highlight examples of Havering's housing stock detailing the building deficiencies that cause cold bridging.

When condensation occurs on an area that is not regularly wiped the added problem of mould will occur.

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Why do we get damp and mould?

Archetype No (and Table S1 age band)	Typical representative photos	Construction Period	RAG rating
1 (A)		Georgian 1714-1837	Amber (3)
2 (A)		Victorian 1837-1901	Amber (4)
3 (B)		Edwardian 1901-1910	Amber (4)
4 (B)		1920-1930	Amber (4)
5 (C)		1930-1940	Amber (4)
6 (C/D)		1940-1960	Red (5)
7 (D/E/F)		1960-1980	Red (5)
8 (G/H/I)		1980-2000	Amber (4)
9 (J/K/L)		2000-present	Amber (4)

Risk by property type

All buildings may be subject to damp and mould, but certain types of construction are more vulnerable.

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Havering Architypes and Cold Bridging

Macon Way Upminster

The concrete detail around the front door has a low thermal performance, so when the external temperature drops the concrete element becomes colder.

The temperature of these concrete elements will be directly linked to the external temperature.

This concrete detail is directly connected and linked to the internal walls without any thermal insulation or thermal break, thus when the external temperature drops the internal sections of the wall that are directly connected become colder and condensation occurs.

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Havering Architypes and Cold Bridging

Dagenham Park Drive Harold Hill

The concrete balcony's in the attached image are cantilevered into the concrete elements that form the ceilings and floors of the dwellings within this block.

The concrete balcony's have the same low thermal performance, so when the external temperature drops the concrete element become colder.

The balcony is direct connected and linked to the internal ceiling and floor line without any thermal insulation or thermal break, thus when the external temperature drops the internal sections that are directly connected become colder and condensation can form.

The walls are also solid 9”walls and have not had the benefit of cavity wall insulation.

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Havering Architypes and Cold Bridging

Canfield Road, Rainham

The concrete detail forming the main structure of this block has a low thermal performance, so when the external temperature drops the concrete element become colder.

The concrete detail that forms the balcony walkway is direct connected and linked to the internal ceilings and floors of the dwellings without any thermal insulation or thermal break, thus when the external temperature drops the internal sections of the wall that are directly connected become colder and condensation can form.

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Havering Architypes and Cold Bridging

Petersfield Avenue, Harold Hill

The concrete detail that forms the balcony walk way is directly connected and linked to the internal bathroom and bedroom ceilings of the ground floor dwellings without any thermal insulation or thermal break, thus when the external temperature drops the internal sections of the ceiling that are directly connected become colder and condensation can form.

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Havering Architypes and Cold Bridging

Petersfield Avenue, Harold Hill

The concrete balcony's in the attached image are cantilevered into the concrete elements that form the ceilings and floors of the dwellings comprising this block.

The concrete balcony have the same low thermal performance, so when the external temperature drops the concrete element become colder.

This balcony is direct connected and linked to the internal ceiling and floor line without any thermal insulation or thermal break, thus when the external temperature drops the internal sections that are directly connected become colder.

The walls are also solid 9” walls and have not had the benefit of cavity wall insulation.

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What is condensation ?

Damp and Condensation

Controlling condensation is important to prevent mould from developing. Condensation is caused by moisture in the air. It is not usually caused by a building fault.

Condensation is the process by which water vapour in the air is changed into liquid water.
In other words, the water in the air, created by hot showers, cooking, drying clothes, is cooled and meets it dew point.
If the air temperature is 21ºC and relative humidity is 70% or higher condensation would occur on surfaces at 15ºC or less.

In some cases, the cold bridging detailed in the Havering's archetypes creates the ideal surface areas for condensation to occur as surfaces can drop easily below 10ºC.

The moisture that is deposited onto the walls & ceilings within the dwellings, if not regularly wiped can cause the creation of mould.

Wall’s and ceilings within typical dwellings are normally comprised of porous surfaces, like plaster that will absorb moisture easily allowing mould to form.

Additional Pressures and Overcrowding

The Impact of Additional Pressures and Overcrowding

The amount of condensation and mould can be increased by factors such as overcrowding and furniture, clothing, and bags being placed close to external walls as airflow is restricted and moisture containing air can settle more easily.

This can often result in residents belongings becoming damp and spoiled and consequently complaints and frustration from resident.

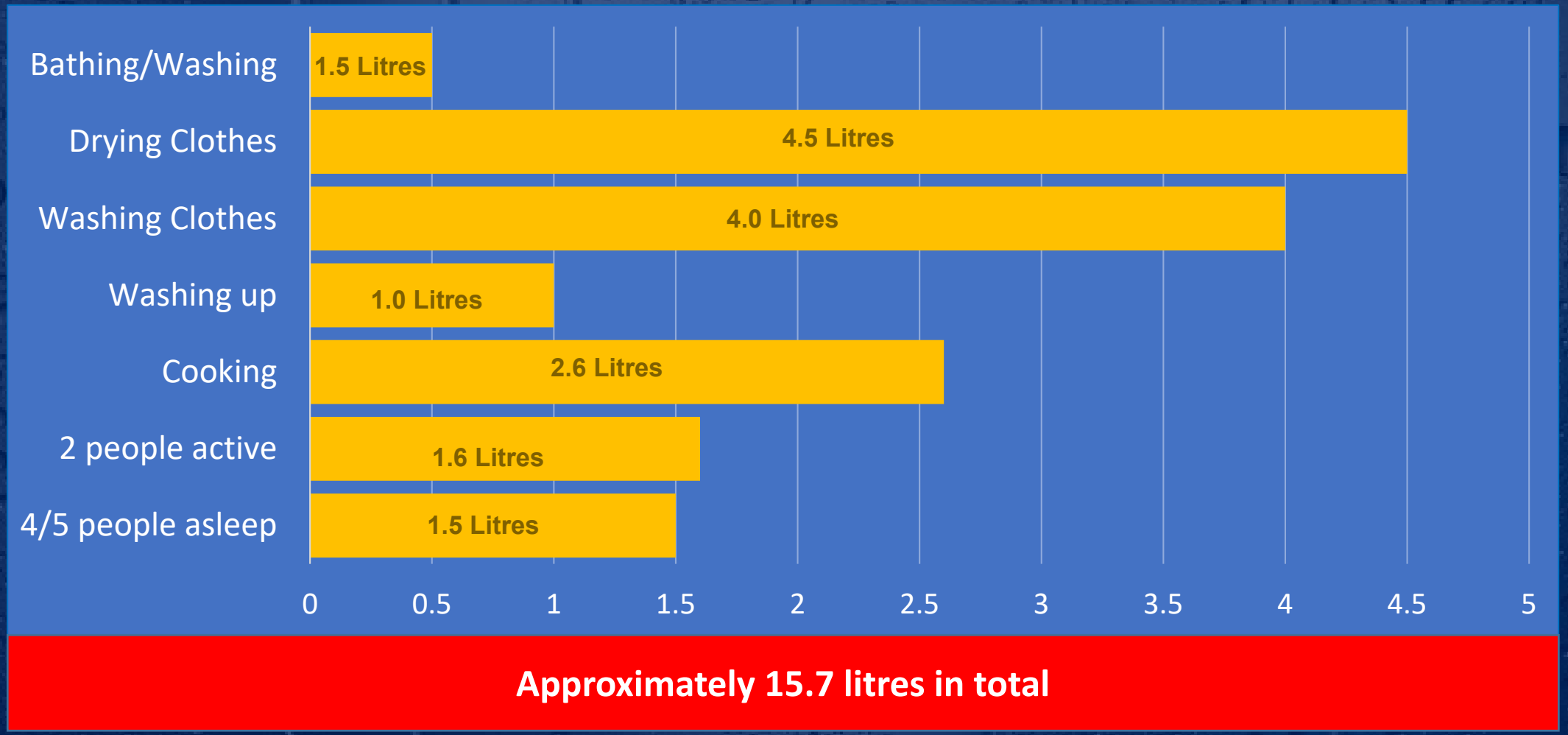
The cost of living crisis is also adding additional pressure, whereby residents cannot afford to use there heating.

Many families within Havering are not legally overcrowded even though their living conditions may be very cramped.

Larger families within smaller dwelling that have the building deficiencies highlighted in some of housing most common Archetypes will be at a far greater risk of condensation occurring.

The table in the slide below details how much moisture is created by daily tasks, this moisture settles on the cold surface areas created by the cold bridging building deficiencies detailed above.

Water Vapour source in an ‘average’ house per day (in litres)



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Modifications & Changing Building Use

Some historic building modernisation has exasperated the issue. Havering have upgraded the original crittall windows that acted like condensation traps due to their cold surface area this has greatly improved the dwellings but the moisture held within the air is now hitting its due point on the cold surface areas on the walls.

Havering have also introduced electric showers, central heating system blocked up open air bricks & fire places

Maintenance Approach to Damp & Mould

Supporting our residents

We've improved our processes so that anyone can report a damp and mould concerns to us quickly and easily, all residents who report damp and mould issues will be offered a surveyors inspection within a target time of 3 weeks.

We also understand that condensation isn't the only cause of damp, it can also come from building defects like leaking gutters, burst pipes, leaking roof, rising damp.

Our surveyor will undertake a detailed property inspection identifying any building defects, raising works orders to remedy any defect identified.

We will look at measures designed to help, such as installing better mechanical ventilation where appropriate.

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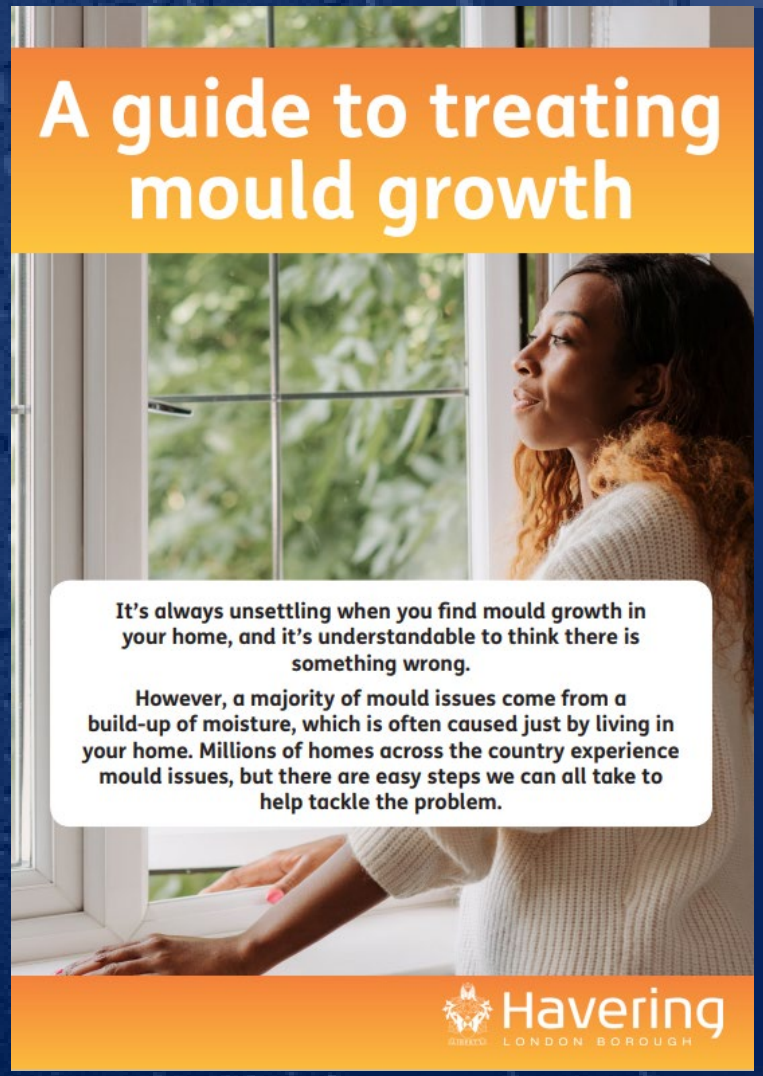
Maintenance Approach to Damp & Mould



Supporting our residents

However we understand that the majority of damp & mould complaints are seasonal, directly linked to the external temperature that drops between November and April therefore we have implement a damp & mould MOT approach to fully support our residents over this period.

We will fully explained the cause of the mould to our resident and offered advice on moisture reduction and management, explaining the underlying issue that makes the dwelling more prone to condensation and how adjustments to life style can dramatically improve conditions and reduce condensation and subsequently mould.

We will offered all resident assistance in the form of a Damp & Mould MOT that includes a regular monthly mould wash programme over a four mother period during the colder winter months. The damp & mould MOT also offers a range of other supports like improved extractor fans, draft excluders, window overhauls and much more.

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Capital Works

The repairs and capital teams liaise with each other on a regular basis to identify any problem blocks and look at developing our future capital programmes to try and alleviate some of the current issues through our retrofit agenda.

We are exploring further external grant funding options such as Wave Three Decarbonisation Funding, that is yet to be announced by the government.

We have allocated £7million in 24/25 and £11million in 25/26 for energy efficiency measures on council properties, which will help to address some of the current issues.

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Conclusion

The damp and mould issues within Havering is a complex matter with many contributing factors including historic building deficiencies that create surfaces areas that are more prone to condensate.

- We will continue to survey and inspect each and every property where damp and mould issues have been reported and take remedial actions where needed.
- We will continue to provide residents with detailed advice on how they can prevent mould growth in there property and offer advice on moisture reduction and management.
- We will continue to offer all resident assistance in the form of a Damp & Mould MOT that includes a regular monthly mould wash programme over a four month period during the colder winter months.
- We will look at measures such as improved extractor fans, draft excluders, window overhauls etc. where appropriate.
- We will look to identify any problem blocks and consider whether these issues can be rectified as part of our future capital programmes.
- We will continue to explore further external grant funding opportunities.

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