

Short review into the health impact of damp and mould in social housing

Housing Select Committee

March 2011



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1. Chair's introduction



Cllr Ami Ibitson

**Chair of the Housing
Select Committee**

Maintaining the homes they manage to ensure the comfort and safety of those living there is a fundamental part of the obligations housing providers owe to their tenants and leaseholders.

As ward councillors, most of us, at some time or another will have dealt with a constituent who is suffering problems with damp and mould in their home, both as a one off incident or as a persistent problem. This can cause anything from an irritation, to a regular need to redecorate, to an unpleasant home environment that may even be having an impact on the family's health, particularly when a family member has a pre-existing condition such as a respiratory illness. Most of us are also aware of the frustration of residents for whom the issue recurs despite works having taken place, or who do not believe their concerns are being considered appropriately by their housing provider.

The Housing Select Committee, has therefore undertaken an investigation into how housing providers respond to complaints about damp and mould, how possible health impacts are considered and the viability of the possible solutions available to landlords, particularly during the current harsh financial climate. Our aim was to identify ways in which housing providers might develop particular or better practices for dealing with damp and mould, to identify the extent of possible health impacts and explore viable solutions to the problem for affected tenants.

Our work on this review began with a focus group with tenants and leaseholders from Lewisham Homes, Regenter B3 and London & Quadrant who had experienced damp and mould of various severity in their homes. This was followed by an evidence session with representatives from the home ventilation industry, housing providers and the NHS. Following some very illuminating and informative sessions, we believe we have made practical and achievable recommendations for our housing partners to act upon which have the potential to benefit residents finding themselves dealing with an issue with damp, mould or condensation. We hope that this will lead to improved practices being put in place when constituents present with a damp, mould or condensation issue, which may be further recommended to other housing partners.

I would like to thank all those residents who gave up their time to attend our focus groups, all those who attended our evidence session – Patrick Gallagher, David Salter, Jane Miller, Lucie Berthoud, Tom Bremner, Malcolm Middleditch, Steve Bonvini, Junia Charlton and Mark Agnew - and council staff – Genevieve Macklin, Madeleine Jeffery, Louise Spires and Clare Ryan. Thank you in particular to the scrutiny team staff who worked on the focus groups and our scrutiny manager Charlotte Dale for her work on co-ordinating and developing this piece of work with us. Last but not least, I would like to thank all the Housing Select Committee and members who took time to contribute to the review.

We hope that our recommendations will prove useful to the Council and our partners and that they will be considered favourably.

2. Executive summary

2.1 This review was triggered by ward councillors noticing that significant numbers of complaints were being received from tenants in relation to damp and mould. The Committee therefore sought to investigate the impact of damp and mould in social housing and to understand what action was being taken and if more action was required.

2.2 The Committee found that many of the solutions being provided to tenants were temporary and represented false economies. Permanent solutions needed to be implemented but, in the case of Lewisham Homes, until sufficient Decent Homes funding was drawn down and deployed, long term solutions could not be resourced.

2.3 The Committee also found that the information being provided to residents by Housing Providers and the NHS, and the information being elicited from residents regarding the nature and impact of their damp and mould problem, was insufficient and needed to improve.

2.4 The Committee has therefore developed a set of recommendations for the Council, Housing Providers and NHS Lewisham that seek to rectify these deficiencies. The recommendations include Housing Providers carrying out an investigation into the merits of all temporary damp and mould solutions; the programming of permanent damp and mould solutions according to priority and risk; the development of single, comprehensive, easy-to-understand public information leaflet; and the development of a new approach to dealing with reports of damp and mould to ensure all relevant information is collected and acted upon.

3. Purpose and structure of review

3.1 The review looked at the health impact of damp and mould in social housing, particularly the prevalence of asthma or respiratory problems. The aim of the review was to (a) identify the extent of the problem; (b) explore and understand what action is being taken by housing providers to deal with damp and mould; (c) consider the particular remedies and treatments being offered to households suffering from respiratory problems by housing providers and health partners; (d) consider if more could be done by housing providers working with health partners to mitigate the effects of mould and damp and alleviate respiratory problems; and (e) consider the ways in which the knowledge and findings from the review can be applied to and disseminated to the private sector.

3.2 The review was scoped in September 2010; focus groups with residents were held in January 2011 (see **Appendix B**); and an evidence session was held in February 2011. The evidence session involved consideration of a comprehensive written report and the questioning of a variety of expert witnesses:

- Patrick Gallagher and David Salter (Kilttox – independent damp specialist)
- Jane Miller and Lucie Berthoud (NHS Lewisham)
- Tom Bremner and Malcolm Middleditch (London & Quadrant - L&Q)
- Steve Bonvini and Junia Charlton (Regenter B3 – RB3)
- Mark Agnew and Denise Johns (Lewisham Homes – LH).

3.3 The Committee agreed its recommendations in March 2011.

4. Background

4.1 Ill health is associated with cold, damp and mouldy conditions and is exacerbated by over-crowding. Such conditions have effects both on physical health and mental well-being. Damp and mould appear to affect children more than adults, in particular exacerbating asthma-type symptoms.

4.2 The Housing Select Committee, at its meeting on 15 July 2010, agreed to conduct a short review into this matter and considered a scoping paper in September 2010. The following key lines of enquiry were agreed:

The level of damp and mould

- What evidence is there of damp and mould in housing managed by LH, RB3 and L&Q?
- What are the number and proportion of LH, RB3 and L&Q properties that suffer from damp and mould?
- What is the average level of annual investment made to remedy such problems by each provider?
- What is the estimated level of investment required to remedy these problems completely?

The health impact

- What is the prevalence of health problems (including respiratory illness) associated with damp and mould in Lewisham?
- Which population groups are particularly affected (including age and geography)?
- How much is spent on health treatments for problems associated with damp and mould in housing (including respiratory illness) in Lewisham?

The action being taken

- Are residents being advised on how to minimise condensation in their homes?
- What action are LH, RB3 and L&Q taking in relation to damp and mould in housing and can this be improved?
- Have there been any problems in identifying the cause of damp and mould and what problems has this led to?
- What treatment and advice is being offered by health services in Lewisham and can this be improved?

The causes of damp and mould

4.3 Condensation (caused by excessive moisture that cannot escape from a building) is the most common cause of damp and mould in housing and accounts for the majority of reported problems. However, condensation is not the only cause of damp. Penetrating damp is caused when water enters a property above its damp-proof course (for example, through defective brickwork, leaky pipes, roofs or overflows) and rising damp is caused by water rising by capillary action through a property's defective damp-proof course.

4.4 The only long-term prevention for damp and mould is to eliminate condensation from the home and prevent rising and penetrating damp. Action can be taken by residents to ensure that (a) activities that produce water vapour are minimised; (b) their home is well ventilated to remove any moist air that is being produced; and (c) room temperature is kept constant across rooms (as air in a warmer room will move to a cooler room, creating condensation).

4.5 In addition to action that can be taken by residents, housing providers may need to take action to prevent penetrating damp by fixing blocked or faulty rainwater gutters, failed render or missing roof tiles. They also need to ensure that all their properties have damp proof courses or damp proof membranes that work correctly (and replace any faulty courses or membranes along with any damp internal plaster) in order to prevent rising damp.

4.6 Dampness sometimes requires on-going, periodic treatment to eliminate it, which can lead to residents feeling that their damp issue is not being taken seriously. Finding the actual cause of the damp and mould is essential, so that the correct action can be taken swiftly. Multiple failed attempts at remedying dampness in dwellings are not satisfactory for the resident or the housing provider.

4.7 If a property has significant mould growth this will need to be treated. Residents should not disturb the mould growth by brushing or vacuum cleaning it as this will circulate the spores, increasing the risk of it causing respiratory problems. A Health and Safety Executive approved fungicidal wash should be used to treat the mould growth.

4.8 The Committee received a report from independent damp specialist Kiltax on the causes of damp and mould, and the remedies available, which can be found at **Appendix A**. This report covers (a) the causes of damp and mould in housing; (b) relevant diagnosis techniques; and (c) the measures that can be taken to prevent/cure the problem.

4. Background

Case studies

4.9 On 13 January 2011, three informal focus group sessions were held with a selection of Lewisham Homes, Regenter B3 and London & Quadrant residents to ensure that the views and experiences of residents in relation to damp and mould, contributed to the review.

4.10 The Committee ran the sessions itself in an informal way (with Councillors as facilitators and scrutiny officers as note takers), in order to get a small sample of residents' views on the issue. Three residents from each housing provider were invited to attend, to ensure that each resident had adequate time to fully explain their situation to the facilitator and make a full contribution to the discussion. Feedback from the sessions can be found at **Appendix B**.

4.11 Members also received some examples of cases involving particular problems with damp and mould from ward councillors' casework.

5. Findings

Housing provider information

5.1 The following paragraphs provide information (a) on the policies and actions followed by Lewisham Homes, Regenter B3 and London & Quadrant in relation to damp and mould; and (b) the information provided to the Committee at the evidence session by the providers, in response to evidence from the focus groups and questions from Committee Members. Comparative information from Phoenix Community Housing and Hyde Housing Association can be found at **Appendix C**.

5.2 Lewisham Homes

- Number of tenanted properties in Lewisham: 13740
- Number of leasehold properties in Lewisham: 5102
- Number and percentage of properties which are street properties including conversions: 6000 – 32%
- Number and percentage of properties which are purpose built flats: 12800 – 68%

Age profile of stock:

<i>A - Pre 1945 Small Terraced Houses</i>	1
<i>B - Pre 1945 Semi Detached Houses</i>	1
<i>C - All other pre 1945 Houses</i>	5
<i>D - 1945-64 Small Terraced Houses</i>	0
<i>E - 1945-64 Large Terraced Semi & Detached Houses</i>	0
<i>F - 1965-74 Houses</i>	14
<i>G - Post 1974 Houses</i>	1
<i>H - Non Traditional Houses</i>	0
<i>I - Pre 1945 Low Rise Flats</i>	1007
<i>J - Post 1944 Low Rise Flats</i>	969
<i>K - Medium Rise Flats</i>	11037
<i>L - High Rise Flats</i>	3413
<i>M - Bungalows</i>	0
<i>Unknown</i>	2392
	18840

5. Findings

Decent Homes programme

- Number of tenanted properties that are non-decent: 7134 (55%)
- Number of tenanted properties that have received works to resolve damp and mould as part of the Decent Homes programme: 1600 (*Roof works, windows, heating, insulation, extractor fans*)

Repairs & Maintenance

- Number of tenanted properties that have had repairs carried out to resolve damp and mould problems (April 2009 – March 2010): *There have been approximately 1758 inspections with regards to damp and mould issues. All of the properties would have at least a mould wash to ceilings and walls to help alleviate their issues.*
- What is the average level of annual investment made to remedy such problems? *£206,294 for 2009-10 (£117 per property)*
- What number and percentage of tenant properties currently suffer from damp and mould? *1758 (12.5%) have reported that they are suffering from damp and mould*
- What is the estimate level of investment required to remedy these problems completely?

<i>Heating</i>	<i>12,000,000</i>
<i>Extractors</i>	<i>1,000,000</i>
<i>Roof works</i>	<i>5,300,000</i>
<i>Rainwater goods</i>	<i>6,900,000</i>
<i>Wall finish</i>	<i>3,400,000</i>
<i>Windows</i>	<i>18,00,000</i>
	<i><u>46,600,000</u></i>

(3,392 per tenanted unit)

- What are the factors that are contributing to damp and mould issues? *Overcrowding of the property, residents' lifestyle, lack of ventilation, defective drainage and pipework, high water table, failure or bridging of damp proof course*
- What actions have been taken in relation to damp and mould in housing? *All our technical staff are trained in identifying damp and condensation and how it can be resolved. The most recent course was undertaken in September 2010. Lewisham Homes carry out 100% of inspections requested by our residents to their homes relating to damp or condensation. If mould is identified during the inspection an order is raised*

for a mould treatment to be carried out to the affected area. When a repair is identified that is causing penetrative damp to our residents' home an order is raised to rectify the defect and any damage caused by the defect. When reporting a damp and condensation issue our residents are asked if their extractor fan works as ventilating their home is found to be a major issue. We are in the process of compiling an information booklet (approximately 7 pages) for our residents on dealing with condensation, damp and mould growth within their home. We are also designing a hygrometer as a visual aid for our residents, this will visibly show them when there is a lack of ventilation and a chance of condensation occurring.

- Have there been any problems in identifying the cause of damp and mould and what problems has this led to? *No. Often a specialist is required to confirm the inspectors findings.*

Complaints

- How many complaints have you received from tenants citing damp/mould problems? (April 2009 – March 2010): *147 (approximate figures)*

Informing Residents

- Are residents being advised on how to minimise condensation in their homes? Please provide detail. *Lewisham Homes handy tips are sent out (e.g. how to control condensation). Also information was recently sent out in issue 13 of Home. (copies available on request). When reporting their issues our call centre staff are our residents first point of contact. Residents are advised by them on how to control condensation, they will arrange a mould wash as a good will gesture and send them the Lewisham Homes Handy Repairs Tip booklet which explains what condensation is and how it can be dealt with. Whilst on site our technical team will advise our residents on how to control condensation within their home and show them the dos and don'ts in relation to their individual lifestyles. The technical officer will show the resident that there are no defects to their home causing the condensation and that condensation is not a repair issue. Our technical will explain the difference between damp and condensation to the resident.*

5.3 At the meeting, representatives from Lewisham Homes were questioned by the Committee and the following information was noted:

- Until Decent Homes funding was drawn down, resources were not available to pay for long term solutions for damp and mouldy properties, hence the difference in spend per damp and mouldy property between Lewisham Homes and the other two providers (Regenter B3 and L&Q). Furthermore, the amount of Decent Homes funding that would be finally received might be less than the amount Lewisham Homes and the Council

5. Findings

had calculated as being required. 55% of properties were non-decent which increased the likelihood of properties being in a condition which facilitated the presence of damp and mould.

- It was accepted that the treatments being offered (mould washes etc.) were temporary solutions and false economies, but until Decent Homes funding was received, permanent solutions could not be financed.
- In properties which were overcrowded or which contained too much furniture and possessions, it was very difficult to prevent condensation (and then damp and mould) from appearing and returning after treatment.
- Residents were not asked if they had any relevant health conditions when they reported a damp and mould issue.
- Overall, reporting mechanisms were being improved – once a problem was reported, a survey was carried out, diagnosis made, the resident was informed of the verdict and an appointment for treatment was made – all of which was carefully recorded. Operatives were also operating in certain areas on certain days, meaning that more appointments could be carried out.

5.4 Following the evidence session, the Committee was informed that Lewisham Homes had been granted an allocation of £94.5m to fund Decent Homes works in the borough – including £25.5m over the next two years – by the Homes and Communities Agency (HCA). Although the funding fell short of the Council's bid of £126m, it would enable Lewisham Homes to make a start on delivering decent homes works for residents.

5.5 Regenter B3

- Number of tenanted properties in Lewisham: 1333
- Number of leasehold properties in Lewisham: 507
- Number and percentage of properties which are street properties including conversions: 403 (21.9%)
- Number and percentage of properties which are purpose built flats: 857 flats (46.6%), 286 maisonettes (15.5%)
- Age profile of stock: Pre 1870 to post 1985

Decent Homes programme

- Number of tenanted properties that are non-decent: 53 (4%) (no access properties)
- Number of tenanted properties that have received works to resolve damp and mould as part of the Decent Homes programme: 7(0.5%)

Repairs & Maintenance

- Number of tenanted properties that have had repairs carried out to resolve damp and mould problems (April 2009 – March 2010): 133 - 10%
- What is the average level of annual investment made to remedy such problems? £60,000 approx (£451 per property)
- What number and percentage of tenant properties currently suffer from damp and mould? 133 – 10%
- What is the estimate level of investment required to remedy these problems completely? £150,000 (£1,128 per property)
- What are the factors that are contributing to damp and mould issues? *Overcrowding, too many possessions, cold bridging, water vapour generation, lack of free flowing air throughout*
- What actions have been taken in relation to damp and mould in housing? *Treatment of mould, redecoration with various specialist paints, thermal boarding, installation of positive ventilation units, teaching on lifestyle issues.*
- Have there been any problems in identifying the cause of damp and mould and what problems has this led to? *Many, as each case is unique. Leads to complaints and court action.*

Complaints

- How many complaints have you received from tenants citing damp/mould problems? (April 2009 – March 2010): 30 (*Equipe investigate each case using a scoring spreadsheet which triggers advice and action this includes fitting positive air systems mould treatment and painting*).

Informing Residents

- Are residents being advised on how to minimise condensation in their homes? Please provide detail. *Equipe investigate each case using a scoring spreadsheet which triggers advice and action. Equipe are currently updating their condensation advice leaflet.*

5.6 At the meeting, representatives from Regenter B3 were questioned by the Committee and the following information was noted:

- Complaints that damp and mould problems had been created by Decent Homes work were due to the ‘cold bridges’ in a property moving elsewhere once double glazing had been installed. The previous, single-glazed windows were poorly insulated and were the focus for the formation of condensation. However, once double glazing had been installed and the property made more energy efficient, poorly ventilated areas in each room (such as behind sofas or wardrobes) became the new ‘cold bridge’ where condensation would collect and mould would form.

5. Findings

- Regenter B3 had now successfully reduced the number of properties reporting damp and mould from 12% to 3% (35 properties). These properties would all be receiving envirovents (recommended by the specialist consultants employed by Regenter B3 to determine the best solution to persistent damp and mould problems in their properties), should the trial of the vents taking place in six properties be successful. This was despite the vents not being part of the agreed specification. It was further noted that airbricks were not the solution recommended by the specialist consultants.
- Residents were given lifestyle advice to help reduce condensation in the home, but it was accepted that the advice was not always practical as it was a security risk to leave windows open in ground floor flats and not always possible to dry clothes outside. (It was noted that security and winter weather were issues preventing residents from using external drying areas).
- Anti-mould paint and sealants were not used as a matter of course, but were used in those properties that had reported damp and mould.
- Any mould found in properties was removed using a three step mould wash.
- Reporting mechanisms were being improved – all jobs were now appointment based, all operatives had PDAs (personal digital assistants / hand-held computers) and a satisfaction report was made on-site so managers could monitor the operatives in real time.

5.7 London & Quadrant

- Number of tenanted properties in Lewisham: 6842
- Number of leasehold properties in Lewisham: 1682
- Number and percentage of properties which are street properties including conversions: 4302 (51%)
- Number and percentage of properties which are purpose built flats: 4222 (49%)
- Age profile of stock: Pre 1900 – 27%; 1900-1945 - 29%; older than 1945 – 44%

Decent Homes programme

- Number of tenanted properties that are non-decent: 100% Decent as at 31 October 2010 (excluding Chrysalis Stock Transfer where there is 18 months programme to reach 100% decency)
- Number of tenanted properties that have received works to resolve damp and mould as part of the Decent Homes programme: 32 Properties have

been identified as requiring works to resolve damp as part of the decent homes programme. However, all properties that receive Decent Homes work are checked for damp and it is ensured that all have mechanical extract fans in Kitchen and Bathroom. Depending on the nature of the damp it is resolved by the Decent Homes work. If it cannot be, and requires a specialist to become involved, it is referred to the Maintenance team who deal with the damp utilising specialist contractors.

Repairs & Maintenance

- *Number of tenanted properties that have had repairs carried out to resolve damp and mould problems (April 2009 – March 2010): 96 (1.4%) properties had works relating to damp in this period.*
- *What is the average level of annual investment made to remedy such problems? Between 1st April 2009 & 31st March 2010 the Trust spent approximately £239,000 (£3,464 per unit) to remedy damp issues and £230,000 (£3,125 per unit) on associated repairs. In addition, in excess of £300,000 was spent on programmed and preventative measures.*
- *What number and percentage of tenant properties currently suffer from damp and mould? It is estimated that there are approximately 96 (1.4%) of properties currently suffering from damp issues. This may increase following the recent stock transfers.*
- *What is the estimate level of investment required to remedy these problems completely? An annual investment similar to the level of the year shown above is assumed, as a significant value of preventative works are undertaken. The current level of expenditure is £769,000. However, there will be a significant increase due to the recent stock transfers of 2425 tenanted properties.*
- *What are the factors that are contributing to damp and mould issues? The most common form of damp encountered is condensation. Factors that exasperate this are residents' lifestyle, poor ventilation, insufficient heating and lack of clothes drying facilities in flats. Rising damp is also encountered, due to the age of the stock the breakdown of Damp proof Courses is anticipated. However this is an easily identifiable problem and remedied as and when identified.*
- *What actions have been taken in relation to damp and mould in housing? All void properties & homes visited by a member of the Property Services team are checked for Damp and adequate ventilation. If required "Humidistat extractor fans" are fitted or renewed in kitchens & bathrooms. Trickle vents are fitted to all new installations of double glazed replacement windows, central heating is serviced & checked during the annual gas safety & health check. When residents report damp these are inspected and action taken to resolve. Actions will vary from advice on*

5. Findings

lifestyle and how to avoid condensation to installation of damp proof system depending on need. Preventative measures are also undertaken as part of decent homes works.

- Have there been any problems in identifying the cause of damp and mould and what problems has this led to? *Once notified there is little problem in diagnosing damp & mould. The corrective actions, ventilation or heating, are normally taken quickly. Major problems are commonly that the residents, due to lack of funds, disable the fans by removing fuses, or do not run the heating in every room or at a reasonable temperature. Also, drying clothes on radiators, blocking airbricks and not closing kitchen and bathroom doors when steam is being generated.*

Complaints

- How many complaints have you received from tenants citing damp/mould problems? (April 2009 – March 2010): *17 disrepair cases citing damp in the designated period.*

Informing Residents

- Are residents being advised on how to minimise condensation in their homes? Please provide detail. *L&Q currently provide a leaflet (available on request) and give advice on the website. Any visiting maintenance surveyor will also give verbal advice.*

5.8 At the meeting, representatives from L&Q were questioned by the Committee and the following information was noted:

- L&Q's properties were 100% decent, apart from the recent 'Chrysalis' stock transfer. Properties experiencing damp and mould post Decent Homes work were provided with humidistat fans which turned on automatically once a certain level of humidity was reached. This avoided the problem of residents turning off manually controlled fans because they were worried about running costs.
- L&Q were fortunate in being able to borrow against the value of their stock, which provided them with enough funding to spend the amount required on each property to find a permanent solution to damp and mould issues.
- Behavioural changes were important to minimise condensation but technical solutions were equally important.

5.9 Patrick Gallagher from Kiltax Damp Free Solutions reported to the Committee that a comprehensive survey would reveal the causes of damp and mould in any property including condensation, rising damp and penetrating damp; and a whole house solution could be implemented. However, if resources were an issue, a single heat recovery ventilation device could be installed in an affected room and, whilst not rectifying the root cause of the damp, would

continuously remove humidity from the room and prevent damp and mould from appearing on walls and surfaces. The units circulated air, kept humidity at 50% and recovered most (86%) of the heat lost as humid air exited the room, using it to heat cold air entering the room. The running costs of such a device were under £10 a year. The Committee heard that the average family generated 16 litres of water vapour a day and a dehumidifier would not be able to collect this amount of water each day and would be expensive to run.

Health Impact

5.10 The Committee received a detailed report from NHS Lewisham on the health impact of damp and mould, which can be found at **Appendix D**.

5.11 Jane Miller and Lucie Berthoud informed the Committee that, whilst there was clearly a link between damp and mouldy conditions and ill health, illnesses such as asthma were multi-factorial and it was impossible to say that damp and mould was the primary cause of the illness. The link between damp and mouldy conditions and ill health was strongest in older people, children and people with an existing chronic illness. The illnesses most closely linked to damp and mould were asthma, respiratory tract illnesses and allergies. It was further noted that, whilst there was much speculation about what might contribute to or worsen fibromyalgia (chronic pain with no known cause), there was no confirmed link between damp and mould and that condition.

5.12 The Committee heard that the Council's allocations policy took into consideration (a) health conditions which were linked to housing conditions; and (b) health conditions which required specific housing. However it was clear that, for example, a resident with a severe disability which meant that they could not reside in properties with lots of stairs would be accorded a higher priority for rehousing than, for example, a resident with asthma or fibromyalgia which they believed was exacerbated by damp and mouldy conditions.

5.13 Jane Miller indicated that the NHS could do more in this area by:

- Training GPs and Health Visitors in the health impact of damp and mould
- Training GPs and Health Visitors to provide appropriate lifestyle advice to reinforce advice provided by housing managers
- Ensuring that GPs and Health Visitors fully understood the medical assessment process and system of prioritisation
- Ensuring that GPs and Health Visitors signposted patients to relevant services (e.g. advice on benefit maximisation to combat fuel poverty).

5.14 It was further noted that Lewisham Homes and NHS Lewisham had discussed signposting each other's services on their websites.

6. Recommendations

6.1 The Committee would like to make the following recommendations:

For the Council:

1. It is essential that housing providers provide standard information about damp and mould, including how to treat it and how to prevent it reoccurring. The Council could play a co-ordinating role by working with social landlords in the borough to develop a single, comprehensive, easy-to-understand public information leaflet for distribution to tenants and leaseholders. The leaflet should also contain information on the health impact of damp and mould and the options for addressing this, provided with input from NHS Lewisham. It should also inform tenants of their legal rights with reference to the Environmental Protection Act and the Housing Health and Safety Rating Scheme and signpost them to appropriate advice services.

For all Housing Providers:

2. The Committee accepts that permanent solutions to damp and mould are often very costly and, in the case of Lewisham Homes, cannot be achieved until sufficient Decent Homes funding has been received and deployed. The Committee would like housing providers to re-examine what temporary solutions they offer, including envirovents and airbricks, and consider whether a heat recovery ventilation device might be the most appropriate temporary solution (as it is relatively inexpensive, costs less than £10 a year to run and is designed to fully remove damp and mould from the room in which it is installed).

3. Housing Providers should have a protocol in place to deal with any incidences of damp and mould in the same property or block. A checklist should be developed to ensure that trained officers can be sure that, within their experience and knowledge, there are no other causes of damp and mould present in the property at that time.

4. When a resident reports damp and mould, housing providers should ask if the resident or anyone in their family suffers from any relevant illnesses, so this can be taken into consideration in prioritising the repair and if housing re-allocation becomes a possibility. The officer should check if any children or elderly people are living at the property and record their ages.

5. When a resident reports damp and mould, the information provided to them on treating and preventing it should also be provided to their neighbours in adjacent properties, in case those properties are also susceptible to, and suffering from, damp and mould.

6. Housing providers should consider putting a link on their website to relevant pages on the NHS Lewisham website (pages which provide

information about the health impact of damp and mould and the treatments available for associated illnesses). The Committee notes that Lewisham Homes and NHS Lewisham are investigating signposting each other's services on their websites and these moves are to be welcomed and should be implemented as soon as possible.

7. All void properties should be thoroughly inspected for damp and mould and appropriate action taken prior to re-letting.

8. Anti mould paint and sealant should be used in all appropriate circumstances.

8. Ways of increasing the security of outside drying areas or drying rooms should be considered.

For Lewisham Homes and Regenter B3:

10. Any Decent Homes or other works required to remedy condensation or damp and mould must adhere to the value for money protocols developed as part of the Public Accounts Select Committee's review into the Council's Obligations to Leaseholders. Appropriate advice should be provided to leaseholders as to the works required to remedy damp and mould.

For Lewisham Homes only:

11. Decent Homes work should include permanent remedies for damp and mould in properties. Where the cause of damp and mould in a property is structural in some way, and not simply attributable to the household's lifestyle, this should be addressed as part of the Decent Homes work.

12. In planning programmes of Decent Homes work, Lewisham Homes should (a) have regard to where the most serious problems of poor housing conditions, including damp and mould, exist; and (b) have regard to lessons learnt from the Brockley PFI scheme and other housing providers.

13. Although Decent Homes work will be carried out as part of a planned programme, this should not preclude certain works which will provide a permanent solution to damp and mould issues, being brought forward for individual properties, where circumstances justify immediate work.

For NHS Lewisham:

14. The Committee welcomes the work already being carried out by health partners but would like to see closer working between health partners and housing providers. In particular:

6. Recommendations

- Moves being made by Lewisham Homes and NHS Lewisham to signpost each other's services on their websites are to be welcomed and should be implemented as soon as possible.
- GPs and Health Visitors should (a) reinforce the lifestyle advice provided to residents by housing providers, to help minimise damp and mould in the home; and (b) signpost patients to relevant services such as advice on benefit maximisation to combat fuel poverty
- It would be helpful if GPs collected more data from patients suffering from respiratory illnesses and other illnesses associated with damp, mouldy and cold conditions, so the health impact of damp and mould can be better monitored and housing providers made aware of issues with their housing stock.
- The training provided to GPs and Health Visitors on the health impact of damp and mould should ensure that they fully understand the housing transfer medical assessment process and system of prioritisation.

Appendices

Appendix A:

Report from Kiltox
(independent damp specialist)

Appendix B:

Focus Group feedback

Appendix C:

Comparative information
(Hyde Housing Association and Phoenix Community Housing)

Appendix D:

Report from NHS Lewisham

Appendix A



Briefing Note

Damp & Mould in Social Housing Prepared for London Borough of Lewisham

Introduction:

The Environmental Protection Act, The Housing Acts, The Landlords and Tenants Act, and all the fitness standards state that a dwelling must be free from any dampness or defect prejudicial to the health and safety of the occupants. The medical evidence that dampness, condensation and consequential mould growth is prejudicial to health is overwhelming and in court cases is never challenged. Any dwelling affected by dampness or mould growth is a serious health hazard and renders the property unfit.

It must always be remembered that the dwelling is a family home. The place where people spend most of their lives and stale, polluted air will be most damaging to the health of the infants, to young children with their immature immune systems, or to the elderly, who it is known are vulnerable and likely to develop respiratory problems such as Asthma as a result of dampness and mould growth.

Under the law, Landlords have an absolute duty of care to ensure that dwellings are kept completely free from dampness and mould growth. This is why it is vital that any remedial procedure or system totally eradicates dampness and mould growth from the entire dwelling rather than from a limited area or single room.

The direct costs of dampness condensation and mould growth include remedial works, mould cleaning, redecorating, and replacement of damaged property such as carpets, curtains, furnishings and administrative and supervision costs.

These obvious costs pale into insignificance however, when compared to the 'hidden' or covert costs associated with damp related problems; tenant mental and physical ill health, increased fuel and heating bills and possible fuel poverty.

Main causes of dampness in building:

1. Rising damp above ground level.
2. Penetrating damp through walls.
3. Condensation / mould (High Humidity / Poor Ventilation).
4. Lateral damp below ground.
5. General building defects

Diagnosis:

Diagnosing the cause of dampness is often not straightforward. It has been all too common for the recommendation of injecting a damp proof course to be heard as a cure all for dampness.

No damp meter can identify the cause or solution for a damp problem, nor can someone just looking at a damp patch. An experienced, qualified and judgemental surveyor must be employed to observe the cause of the dampness ruling in and out possibilities like a pathologist at an autopsy. Once the cause has been identified the correct solution must be recommended. Again there is not a one product cures all solution for dampness.

A trained expert in surveying buildings for all types damp, condensation, mould, timber decay, ventilation and general building defects would use a selection of the following:

1. Moisture Meter (various types)
2. Hygrometer
3. Thermometer
4. Deep Wall Probes (Damp brick dust sample from deep within the brickwork)

Kiltox Contracts Ltd, 6 Chiltonian Industrial Estate, Manor Lane, Lee, London SE12 0TX
Tel: 08451 66 20 40 Fax: 08451 66 20 50 Web: www.kiltox.co.uk Reg. 2974433

5. Tool for taking deep probe samples from large timbers to assess timber decay and woodworm.
6. Laboratory equipment for taking air samples of mould/fungi. for independent laboratory testing.
7. Swabs for taking mould/fungi samples for independent laboratory testing.
8. Sterile containers for samples of wallpaper, plaster, brickwork, timber decay, woodworm and paint.
9. Snake camera

The specialist surveyor using the above equipment will inspect the building both externally and internally for all the above causes of dampness, will correlate all external general building defects found and how they may relate internally to each separate problem found of rising damp, penetrating damp, lateral dampness, timber decay, condensation, mould growth and cold bridging occurring.

Measures to prevent/cure problem:

Whatever remedial action is taken, must effect a total eradication of dampness, condensation and mould growth from the entire dwelling, otherwise the property will not pass the fitness standard.

The equipment and procedures available for eradicating dampness and reducing humidity levels within a dwelling are diverse, though most are capable of doing what the manufacturers claim. Great care must be exercised however when opting for a specific piece of equipment or a system, to ensure that it is not only capable of dealing with the problem throughout the entire dwelling but that it is also the best practicable, most cost effective solution in the context of the Best Value Initiative not a cheapest to keep the tenant quiet solution.

Solutions:

1. Damp proof course & plastering system.
2. Penetrating damp treatment system.
3. Heat Recovery Ventilation
4. Tanking or water drainage membrane system.
5. General building maintenance repairs

Other options / measures – not generally solutions:

1. Mould cleaning, Anti-mould paints & Chemicals
2. Dehumidifiers
3. Passive Ventilation
4. Conventional extractor fans
5. Positive Pressure / Input ventilation
6. Dry Lining / Insulation / Draught Proofing
7. Double Glazing

Further information:

- Housing Health and Safety Rating System - Guidance for Landlords and Property Related Professional <http://www.communities.gov.uk/documents/housing/pdf/150940.pdf>
- A Decent Home: Definition and guidance for implementation <http://www.communities.gov.uk/documents/housing/pdf/138355.pdf>
- Diagnosis & Solutions: www.kiltox.co.uk or www.bwpda.co.uk

Appendix B

Case studies

On 13 January 2011, three informal focus group sessions were held with a selection of Lewisham Homes, Regenter B3 and London & Quadrant residents to ensure that the views and experiences of residents in relation to damp and mould, contributed to the review. The Committee ran the sessions itself in an informal way (with Councillors as facilitators and scrutiny officers as note takers), in order to get a small sample of residents' views on the issue.

1. Lewisham Homes

Case A

Background: Resident A is a tenant of a 2 bedroom, ground floor flat. The flat has gas central heating and is occupied by 5 people – 2 adults and 3 children. The property was double glazed in 1998.

Issues: There is a problem with condensation in the property and damp and mould in all rooms. When the tenant moved in, in 1998, there was only one small section of damp in one room. Because they are on the ground floor, keeping the windows open for long periods every day is not practical or secure. They have currently been moved into temporary accommodation while the property is redecorated, but they are not convinced that the cause of the damp and mould will be addressed.

Action: The tenant and his wife bleach every day, and follow advice about drying clothes outside whenever possible. They also try to open the windows whenever they can, but the severe problem with condensation and damp is never fully addressed by these actions. They have been moved into temporary accommodation while the property is redecorated by Lewisham Homes. They feel that housing officers and various staff have not addressed the underlying damp and mould problems.

Impact: Resident A's daughter has asthma that, it is felt, is worsened by the damp, and she has missed a lot of school and been hospitalised on one occasion as a result. Resident A's wife had a respiratory problem that also required hospitalisation, and his son had a severe fungal infection over one side of his face that he believes was caused by the damp and mould, which improved once they were moved into temporary accommodation.

Case B

Background: Resident B is a tenant, living in a 3 bedroom ground floor flat, which has gas central heating. There are 6 people living at the property, 2 adults and 4 children, aged 8 and under.

Issues: When the tenant moved in there were a few green stains near the windows. After two years it had spread into every room and over the walls and up to the ceilings. There is damp and mould in every room, one bedroom is so bad it is unusable. In addition there is a serious leak from a flat above that has not been resolved over a long period of time, which not only exacerbates the existing damp and mould problems, but also leaks onto the electric fuse box and through light fittings. There is a lot of condensation and mould in the flat that has not been addressed and continues to get worse. Resident B's youngest son has Downs Syndrome and a number of related medical problems, including serious respiratory problems that require him to be on oxygen 24 hours a day. The damp and mould is extremely dangerous for him.

Action: The family were moved into temporary accommodation in February 2010 while the property was redecorated, but the underlying cause of the damp and mould weren't addressed and it continues to be a serious problem, and the wall paper put up has fallen down. Surveyors have visited a number of times, but other than redecoration no action has been taken to address the damp and mould.

Impact: The medical problems of the youngest child continue to be worsened by the damp and mould, his respiratory problems being so bad that Doctors have advised his family to not use air-fresheners, perfumes or deodorants around him, so resident B is very concerned about the impact of a damp and mouldy environment on his son's health. Because of his respiratory problems, they have to leave his pushchair outside their flat chained up when they are at home, as if that gets damp and mouldy it would be dangerous for him, and he needs to be transported in it at all times because of the need for oxygen tanks to be accommodated. Another child has asthma, which is exacerbated by the damp, and the school age children are teased at school because they often smell because of the damp in their clothes. A lot of time is spent chasing the housing provider, who comes out and inspects the flat but then takes minimal or no action, which is upsetting for the family.

Case C

Background: Resident C is a tenant living in a 2 bedroom, top floor flat in a tower block which has gas central heating. (He is also chair of the local Tenant and Resident Association (TRA) so also spoke on behalf of members within his association.) New windows were installed in the block approximately 15 years ago.

Issues: When resident C moved in, in September 2001, there was a damp patch on the living room wall. This slowly got worse over the last 9 years with Lewisham Council and then Lewisham Homes initially advising that it was not their responsibility and nothing could be done. Eventually it was ascertained

that this was due to a hole in the roof which was fixed and the damp patch was repaired in late 2010.

There are also damp problems throughout the block; due to the design of the flats there is little ventilation in the bathrooms and toilets as there are no windows in those rooms in any of the flats. Due to condensation, the wooden window frames in all flats (144 in block) are slowly starting to rot and turn black due to the damp and condensation. Residents have repeatedly requested a treatment to the frames to protect them from the damp, and also requested improved ventilation in the bathrooms.

Also, because there is no longer a concierge service in the block, there is no one on site to turn the water pumps off and on when there is a leak, meaning that a leak takes much longer than necessary to be dealt with causing much more damage (and dampness) to a number of flats than used to be the case. It also means that there is no security to prevent people getting into the block and getting on the roof, where aerials have been affixed illegally, leaving holes in the roof, causing leaks and damp to the top flats.

Action: The hole in the roof and subsequent damp was fixed by Lewisham Homes in November 2010, 9 years after the resident first raised it as a concern and after initially being told that there was nothing that could be done. Lewisham Homes have refused to provide a treatment to the windows to protect them from rotting due to condensation, so residents are now trying to address the matter via their local assembly. Appointments to survey the problems and deal with them are often not kept by Lewisham Homes surveyors and staff.

Impact: Residents are concerned that their window frames are slowly rotting and are mouldy and will require replacing, when they could be maintained as they are good quality wooden double glazed windows that residents are happy with. The poor ventilation in bathrooms due to poor design could be improved with better ventilation being fitted.

2. Brockley PFI

Case A

Background: Resident A is a tenant, living in a two bedroom ground floor flat, which has had decent homes work carried out. The property has gas central heating. Two people live in the property.

Issue: Resident A believes that Decent Homes work in May last year has exacerbated the problem of mould in the property. Resident A reports that there are no proper air vents in the property apart from on the windows. A neighbour has airbrick vents and has no mould. There is mould on sealant in the bathroom and resident A does not think that anti-mould sealant was used

when the bathroom was refurbished. There is no radiator in the bathroom, making it very cold.

Action: Envirovents have been fitted and the flat has been re-decorated but there is still mould. Resident A does not feel that envirovents are as effective as airbrick vents and thinks that the building's damp-proof course needs to be replaced. Resident A thinks that being advised to keep windows open to minimise condensation is not practical on the ground floor, due to the risk of burglary, and it is not possible to keep the tiles and sealant dry in a bathroom.

Impact: Resident A (and Resident A's spouse) are in poor health and the mould exacerbates this. Resident A's asthma has got worse and Resident A's spouses' breathing has become laboured. They also believe their joints have been affected as they seem stiffer than they used to be.

Case B

Background: Resident B is a tenant, living in a two bedroom ground floor flat, which has had decent homes work carried out. The property has gas central heating. 4 people live in the property.

Issue: Resident B moved in to the property in 2005 when her daughter was 6 months old. The windows were single glazed with metal frames and covered in mould and there was always condensation. The walls of her daughter's bedroom were covered in mould and wet to touch with water dripping down them.

Action: Following Decent Homes work last year and the fitting of envirovents, the problem has largely been rectified. The motorised vents in her daughter's bedroom work well and it is now dry. However, Resident B is still waiting for compensation for the furniture and clothing she had to replace due to them being covered in mould. Resident B is not sure if the paint used for redecoration had an anti-mould agent in it, as a few odd patches of damp have re-appeared.

Impact: The mould increased Resident B's daughter's asthma and, as her daughter was prone to chest infections, it encouraged her ill-health. Although the issue has largely been resolved, it did cause a lot of stress.

Case C

Background: Resident C is a tenant, living in a two bedroom ground floor flat, which has had decent homes work carried out. The property has gas central heating. Resident C lives alone.

Issue: Resident C believes that the fitting of double glazing in 2009 as part

of the decent homes work has made the mould in the flat worse. Resident A has had to stay at a family member's house on numerous occasions as it was not safe to stay in her flat due to the mould.

Action: Although the mould has been repeatedly washed down, it has always returned. A permanent solution has not yet been found. Resident C is still waiting for some large pipes in the property (that allow in air and moisture from outside) to be boxed in. Resident C uses a de-humidifier to remove moisture from the flat but this is expensive to run.

Impact: Resident C thinks that the mould and damp is causing back and joint pain. This is in addition to stress and depression caused by having to move out of her home to stay with a family member on a number of occasions due to the mould. Practically, Resident C reports annoyances such as not being able to close wardrobe doors as this encourages mould growth – the doors have to be left open to allow the air to circulate. Resident C has felt for a long time that the case 'isn't being taken seriously'

Brockley PFI – Common themes

The following points were made by the Brockley PFI Focus Group once their cases had been discussed:

- There is a general **lack of communication**. Residents are not kept updated on action that will be taken in relation to mould in their properties, and other repairs and maintenance. They feel that it was better a few years ago when there were proper job sheets so residents knew who was coming, when they were coming, what job they were doing and who they could ring if the workers did not arrive. Residents commented that all they got now was a job reference number. They reported that officers rarely call them back and correspondence is sometimes lost. Although there are a number of individual officers who do an excellent job, action is often required from a number of officers and messages are not communicated down the chain effectively. For example, surveys are carried out but then are not passed on to the appropriate person.
- Residents feel that a lot of the **advice provided is not practical**. It is not safe to leave windows on the ground floor open. If you do not have access to outside space, or a tumble dryer, clothes have to be dried on radiators. Tiles and sealant in the bathroom cannot be kept dry. Advice not to use the 'showers' (as they are only rinse aids – designed to rinse the bath after use) is hard to follow – there is not always time to have a bath, showers are quicker.
- Residents feel that some of the work carried out is **poor quality work** and that, in particular, the vents that have been fitted are of low quality. One resident remarked that a lot of the work being carried out seems to be

aimed at 'patching up' a problem or 'buying time' rather than solving the problem permanently. Sometimes re-decoration happens without the underneath, mouldy plasterwork, being replaced. They would like the people carrying out jobs in their home to have **lengthy and relevant experience** and to behave in a **professional manner**.

- Residents feel that only **anti-mould sealant** should be used in bathrooms and paint with an anti-mould agent used for redecoration.

3. London & Quadrant

Unfortunately two residents were unable to attend on the day, so only one L&Q case was considered.

Case A

Background: Resident A lives with her daughter in a 2 bed flat in a converted house. The property has gas central heating.

Issue: The damp problem started at the end of 2009/beginning of 2010 with damp and mould in the daughter's bedroom. From there the mould spread to nearly all the rooms, with particularly bad problems in the 2 bedrooms. Resident A was told that it was likely due to condensation although there is no visible condensation on windows in the property. Damp and mould is not a problem for other residents in the flats in her house.

Action: The problem was reported to the housing provider first. There was a visit to the house initially, but nothing done immediately in terms of work, and no follow up. When following up the complaint Resident A was told the file had been lost. During further inspection a machine was used to examine the damp area. Resident A was told the damp wasn't present in any other rooms although it later spread. Resident A also followed the advice given to her about reducing condensation. Following 5 to 6 months of calls Resident A involved a solicitor to help with the process. Work was carried out in November 2010 in the daughter's room with the wall treated and replastered. Since then the damp has started to appear again although not as severe as previously. Resident A is now planning on asking her local MP to raise the issue.

Impact: Resident A has eczema which has flared up and got worse while living with the damp and mould problem. Resident A's daughter has also been frequently sick with colds and has missed a lot of school though this has improved since the work was carried out. In addition clothing and footwear has been damaged in the wardrobes and cupboards due to mould. Resident A feels that the housing provider has had to be pushed very hard to do anything and there has been a reluctance to carry out work that might be expensive.

Appendix C

Comparative information from Phoenix Community Housing and Hyde Housing

1. Phoenix Community Housing

- Number of tenanted properties in Lewisham: 5496
- Number of leasehold properties in Lewisham: 807
- Number and percentage of properties which are street properties including conversions: 56%
- Number and percentage of properties which are purpose built flats: 44%
- Age profile of stock: *The area is dominated by 'cottage style' estates – mainly houses and bungalows built between 1919 and 1945, with a relatively small number of low to medium rise flats and maisonettes.*

Decent Homes programme

- Number of tenanted properties that are non-decent: 3553 as at 31 March 2010
- Number of tenanted properties that have received works to resolve damp and mould as part of the Decent Homes programme: 3

Repairs & Maintenance

- Number of tenanted properties that have had repairs carried out to resolve damp and mould problems (April 2009 – March 2010): 421
- What is the average level of annual investment made to remedy such problems? *£151.49 per property*
- What number and percentage of tenant properties currently suffer from damp and mould? *Seasonal (and systems don't report this as a separate category)*
- What is the estimate level of investment required to remedy these problems completely? *Not known. Resolution is usually a combination of education and physical interventions.*
- What are the factors that are contributing to damp and mould issues? *Environmental issues of the property; mechanical defects; lack of education.*
- What actions have been taken in relation to damp and mould in housing? *Thorough property investigation, thorough and exact testing, specialist consultants.*
- Have there been any problems in identifying the cause of damp and

mould and what problems has this led to? *Disrepair cases, complaints, compensation.*

Complaints

- How many complaints have you received from tenants citing damp/mould problems? (April 2009 – March 2010): 42

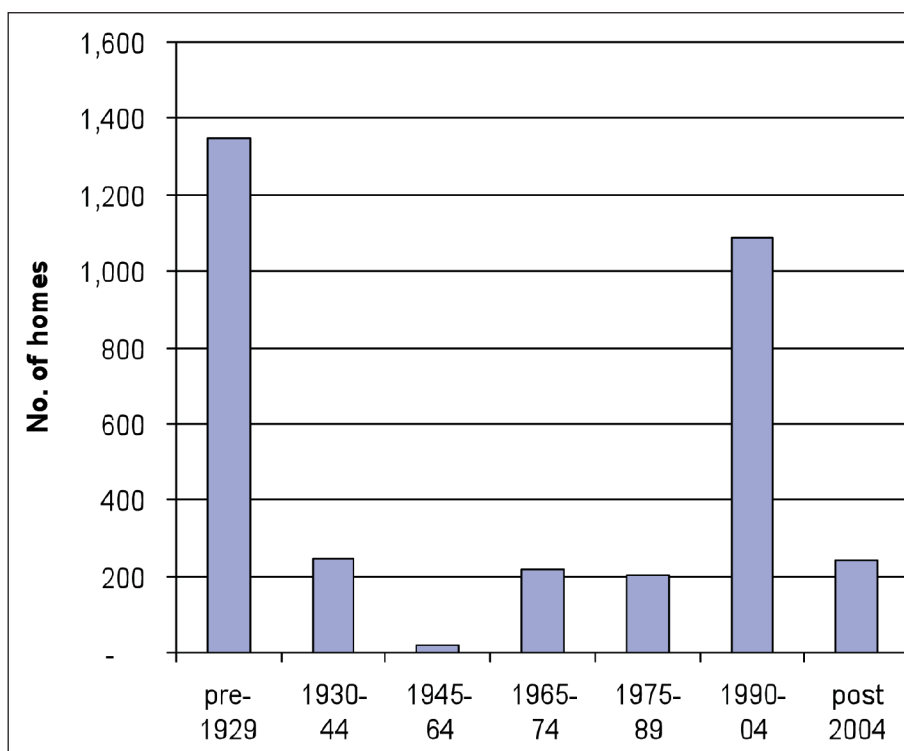
Informing Residents

- Are residents being advised on how to minimise condensation in their homes? Please provide detail. *Leaflets, communication, education, website, training.*

2. Hyde Housing Association

- Number of tenanted properties in Lewisham: 2,792
- Number of leasehold properties in Lewisham: 412
- Number and percentage of properties which are street properties including conversions: 1,351 (*pre-1929 flats & houses*)
- Number and percentage of properties which are purpose built flats: 1,080 (*post 1929 flats*)
- Age profile of stock:

Hyde stock in Lewisham by age of construction



Decent Homes programme

- Number of tenanted properties that are non-decent: 58
- Number of tenanted properties that have received works to resolve damp and mould as part of the Decent Homes programme: *In total there are 58 properties failing decency within Lewisham and of those, 6 now fail as a result of damp related issues. Our stock condition database doesn't separately record costs against this work stream.*

Repairs & Maintenance

- Number of tenanted properties that have had repairs carried out to resolve damp and mould problems (April 2009 – March 2010): 27
- What is the average level of annual investment made to remedy such problems? *£18,000. However this is merely to react to the symptoms.*
- What number and percentage of tenant properties currently suffer from damp and mould? *6 current cases*
- What is the estimate level of investment required to remedy these problems completely? *See additional text*
- What are the factors that are contributing to damp and mould issues? *See additional text*
- What actions have been taken in relation to damp and mould in housing? *See additional text*
- Have there been any problems in identifying the cause of damp and mould and what problems has this led to? *See additional text*

Complaints

- How many complaints have you received from tenants citing damp/mould problems? (April 2009 – March 2010): *Unfortunately our complaints aren't recorded by Borough nor by type of failure beyond the classification of say repairs, gas servicing, defects etc and as such little or no data is available at this time.*

Informing Residents

- Are residents being advised on how to minimise condensation in their homes? Please provide detail. *Yes – Damp & Mould information leaflet included with tenancy pack and available to residents in Hyde and given to new tenants. (Copy available upon request).*

Additional text

The key distinction to be made is between penetrating dampness and condensation.

Penetrating dampness is the passage of moisture from the outside of the property to its inner surfaces. Pre-1929 homes with solid walls lacked sufficient in-built barriers to moisture movement, leading sometimes to rising or penetrating dampness. Basements are particularly vulnerable because they lie below ground level. The solution to rising dampness is injection of a chemical damp proof course (DPC) and re-plastering with non-permeable plaster. Basements have to be tanked (effectively a vertical barrier) to seal walls, with a damp proof membrane (DPM) to seal the floor. This is major work which cannot be done with a tenant in occupation. Other forms of penetrating dampness may be caused by rainwater from a leaking roof, gutters etc, and fixed by repair of these.

Condensation is the more common & persistent problem causing mould formation. Its diagnosis needs careful and systematic thought because it can easily be misdiagnosed between rising, or penetrating, condensation and/or lifestyle issues, and indeed all of these may be combined. Unfortunately, a number of companies specializing in damp treatment have a commercial interest in finding problems with penetrating damp, and we therefore treat such diagnosis with caution. Problems encountered through misdiagnosis can be delays in achieving a suitable solution, increased compensation claims and a loss of resident confidence that a solution will be found - when sometimes the solution is a lifestyle issue that requires careful management.

Condensation usually arises in older pre-1929 homes with solid walls with poor insulation characteristics. When built, condensation was not a problem because windows were draughty and heating was through fireplaces, both giving ample ventilation. Modern replacement windows and sealed central heating systems reduce this ventilation and lead to condensation. Different households generate different volumes of moisture and a home that did not have mould when occupied by one household may have it with another. Some tenants are unwilling to adequately ventilate their homes because of fear of heating costs.

Solutions to condensation are difficult, partly because of the tenant factor but primarily because these homes have fundamental limitations that very difficult to address. Basements in particular are difficult to treat. Wall and floor insulation, built-in ventilation, and adequate heating by tenants, are all necessary to solve the recurring problem of condensation. Wall and floor insulation is expensive and disruptive work that is difficult to provide with a tenant in residence.

Appendix D

The link between cold, damp and mould in houses, and its effect on health

The London Borough of Lewisham Housing Select Committee

1. What is the prevalence of health problems (including respiratory illness) associated with damp and mould in Lewisham?

1.1 Associations between health and housing

The association between living in a damp building and health effects such as cough, wheeze, allergies, and asthma is well established.ⁱ Cold housing has been linked with a number of health problems including mental health, asthma and cardiovascular disease. Table 1 demonstrates this.

Table 1

The impact of poor housing on health, The Policy Press, Bristol, 1999

Adapted from Marsh, A; Gordon, D; Pantazis, C. and Heslop, P Home Sweet Home

HOUSING CONDITION	POTENTIAL CONSEQUENCE
Physical Health	
Overcrowding	Increased risk of infectious/respiratory disease. Reduced stature.
Damp and Mould	Respiratory problems. Asthma, rhinitis, alveoli is. Eczema.
Indoor pollutants and infestations	Asthma.
Cold Bronchospasm.	Diminished resistance to respiratory infection. Hypothermia. Ischemic heart disease, myocardial infarction and strokes.
Homelessness (rooflessness)	Problems resulting from facing the elements without protection. Risk of assault.
Homelessness (temporary accommodation)	Problems resulting from overcrowding, noise, inadequate cooking and washing facilities.
Mental Health	
Relatively poor quality housing in each tenure	Residents mental well-being reduced.
'Difficult to let' housing	Poorer emotional well-being than people in 'better' areas.
Damp	Depression in women
Overcrowding	Emotional problems, bed wetting, developmental delay, poorer educational attainment and mental adjustment in children. Social tension, irritability, impairment of social relations.
Flatted accommodation	Increased GP consultation by women for emotional symptoms. Social isolation and psychiatric disturbance among women.

Asthma has the most easily identifiable link to poor housing and therefore this report will mainly focus on this aspect of illness. Asthma is an airways disease that is caused by a complex interaction between genetics and the environment. There are many factors that are thought to be involved in the causation of asthma, along with genetics, including cigarette smoke, infections and inhalation of pollutants. Indoor air pollutants include house dust mite faeces, fungus spores, and pet and cockroach allergens.ⁱⁱ It is difficult to say which of these triggers causes or exacerbates asthma for any one patient.

Cold indoor conditions are associated with higher levels of damp and mould.ⁱⁱⁱ Higher levels of damp predispose to bacteria and virus replication, as well as mould and fungus formation. As a result, infectious respiratory illnesses and atopic illnesses including asthma are likely to be more prevalent in colder or poorly insulated housing.^{iv} Higher humidity levels in turn increase proliferation of dust mites.²

Damp is caused by inadequate heating and poor ventilation, leading to high humidity levels and condensation. Providing more effective heating systems, improving ventilation and improving insulation will reduce cold, damp and mould in housing.⁴

Research has examined the effect of housing on health but it is difficult to prove that one aspect of housing such as damp and mould is the only cause of specific illnesses.^v This is due to the fact that causation is multi factorial and the exact cause is therefore difficult to state.

A study performed in 2007 in New Zealand¹ looked at the effect of insulating houses and therefore increasing indoor air temperature. This study concluded that fitting insulation was a cost effective intervention for improving health and wellbeing. The Glasgow warm homes study^{vi} was reported in 2001. This study concluded that intervention to increase the warmth and insulation of a house lead to improved perceived wellbeing of the residents.

Research in Lambeth published in 2005,^{vii} that despite over a thousand elderly households being offered free gas central heating fitting, only 26% of households elected to have systems installed. Reasons for not having the systems installed included concerns about the upheaval during works, concerns about health, and fears over increased heating costs.

The World Health Organisation states that housing improvements that ensure the provision of affordable warmth may have the greatest potential to reduce the adverse effects of poor housing.^{viii}

Due to the association between living in a damp building and health effects such as cough, wheeze, allergies, and asthma being well established, improvements in housing are likely to improve health for those living in cold damp or mouldy environments.

1.2 Prevalence of asthma in relation to damp, mouldy and cold houses

As described above, it is difficult to state exactly which health problems are directly linked to specific environmental factors like damp and mould. This is because asthma and other illnesses have multi factorial causes. Therefore, it is not possible to evaluate the exact prevalence of health problems that are directly related to cold, damp and mouldy living conditions. Only information regarding asthma has been provided in this report as this has the strongest association.

Asthma is common, affecting over 5 million people in the UK, about one in twelve of the population. Overall prevalence figures are not available at borough or PCT level, but in 2007/8 the national prevalence rate was 5.75%.^{ix}

In the appendix, the graphs and tables look at the possible prevalence of asthma in Lewisham, through hospital admissions and asthma diagnoses by GPs, from the Quality and Outcomes Framework. ^x These results have not been placed into the main body of this report because no correlation between these results and the prevalence of illness related to damp, mould or cold housing can be made. This is because, although there is a known association between damp housing and asthma, there are many other contributory factors to asthma. For example, people living in cold, damp or mouldy housing are likely to also live in more deprived areas and smoking prevalence is higher among people on low incomes.

2. Which population groups are particularly affected (including age and geography)?

Colder houses place more physiological stress on older people, babies, and sick people. These people are also more likely to spend more time inside their homes and therefore have an increased exposure time.¹ Damp and mouldy conditions affect children more than they affect adults.⁵ Children in damp and mouldy conditions are more prone to wheeze.^{3 xi} Older people and those who are very young are particularly at risk from both low and high indoor temperatures and are more affected by cold and damp housing. Those with underlying health problems are also likely to be more at risk.⁷

Asthma has a genetic component and therefore often runs in families. It is more common in adult women than men.⁸ In the appendix, the admission rates for different wards in Lewisham can be seen. This needs to be read with caution; as stated earlier, it is not possible to state that an increase or decrease in the number of hospital admissions due to asthma is directly caused by damp or cold housing. There was no correlation between the number of admissions and the index of multiple deprivation. There was some variation between wards.

3. How much is spent on health treatments for problems associated with damp and mould in housing (including respiratory illness) in Lewisham?

Due to the fact that it is difficult to say how many respiratory illnesses are directly caused by people living in cold, damp mouldy houses, is it not possible to state how much is spent on these problems. However, we do know that there is a link between ill health, mental health, asthma and poor housing. It is therefore likely that better housing conditions could lead to fewer admissions to hospital, fewer days taken off from work and fewer visits to the GP.

4. What treatment and advice is being offered by health services in Lewisham?

Patients suffering from health problems or respiratory conditions that may be caused by living in cold or damp housing are treated in the same way by clinicians as those with health problems that are not related to poor housing.

Health visitors are often in a position where they may come across poor housing in their day to day work. If health visitors have concerns about damp or cold housing, they will usually give basic advice to residents. This would include advice around the drying of clothes and ventilation. If residents have particular concerns, health visitors usually ask them to contact their council or landlord. If there are concerns regarding residents' health and their housing conditions, they would be referred to their GP. Occasionally health visitors are able to help by writing a letter to the council.

GPs will treat the current medical problem, but it is the responsibility of the patient to contact their council or landlord if they are unhappy about housing conditions. There is a medical assessment service, managed through LBL Housing, set up in partnership with the PCT. This service undertakes medical assessments for housing need.

The Deptford Housing and Health Project, which took place in the late 1990s identified that heating and damp were amongst the factors tenants perceived as having a negative impact on their health. This was a community development project which undertook a residents' survey, established a 'Good Neighbour Scheme, developed information packs on home energy efficiency, tackling condensation and trained tenant volunteers to support others, including energy awareness, and effective use of heating systems. This is an example of collaborative working between housing providers and health service agencies that could be taken forward again. The Directorate of Public Health is currently exploring ways to work more effectively with Lewisham Homes and other housing providers on similar issues.

5. How does Lewisham compare to other areas in terms of the action being taken by health providers to address damp and mould issues?

It is unusual for health providers to specifically undertake action on damp and mould issues. There are a number of examples where PCT departments, particularly public health departments work collaboratively with housing departments. It has not been possible to obtain any specific information or examples about this in the given time period.

In conclusion

A link between poor housing and ill-health is evident and unsurprising. Quantifying and relating the effect of any one dimension of poor housing to a single symptom or disease is, and is likely to remain elusive. Despite this, it is reasonable to assume that improving housing quality in Lewisham, ensuring housing is warm and well insulated and educating tenants' in the prevention and management of damp and mould, will be beneficial to their health and well being in general.⁴

Despite this, it is reasonable to assume that improving housing quality in Lewisham, and educating tenants' in the prevention and management of damp and mould, will be beneficial. It should not be ignored however, that treating damp and mould without adequate optimisation of insufficient heating is less likely to improve outcomes. However, without adequate reassurance tenants may be reluctant to receive an intervention.

Appendix 1: Hospital admissions from asthma of Lewisham residents

The following data contains information about the number of admissions to hospital with problems related to asthma, in Lewisham residents from April 2005 to November 2010.

The following table shows the number of admissions, the age range, and location by ward. This does not correlate with the total number of patients in Lewisham who suffer from the symptoms of asthma. It shows the number of people who were admitted to hospital, not the number of patients, some patients may be admitted more than once, and some may never need to be admitted to hospital, but have symptoms that are controlled at home.

Table 2 also shows the Index of Multiple Deprivation (IMD) score for each ward. The highest IMD score was in Evelyn and the lowest in Catford South. The highest number of admissions came from Bellingham and the lowest from Crofton Park ward. It should be noted that the IMD score does not correlate with the number of hospital admissions with asthma.

It is not possible to extract from this information, which of these admissions were caused or exacerbated by cold, damp or mould in housing.

Table 2: Numbers of Admissions by age and ward 2005 to 2010

Ward	IMD	Admissions Age 0–14	Admissions Age 15–64	Admissions Age >65	Total Admissions
Bellingham	37.6	77	25	26	128
Blackheath	27.1	45	10	12	67
Brockley	31.4	32	15	18	65
Catford South	21.4	51	22	26	99
Crofton Park	24.4	42	9	11	62
Downham	37.3	68	20	24	112
Evelyn	41.0	74	19	10	103
Forest Hill	27.8	34	8	25	67
Grove Park	27.4	56	6	12	74
Ladywell	23.6	60	20	18	98
Lee Green	23.2	47	11	17	75
Lewisham Central	34.8	55	17	20	92
New Cross	36.7	72	23	24	119
Perry Vale	30.7	50	17	10	77
Rushey Green	35.6	55	12	18	85
Sydenham	32.1	85	14	27	126
Telegraph Hill	32.1	58	36	15	109
Whitefoot	33.2	62	11	20	93
Total		1023	295	333	1651

Figure 1 below shows the same information as in the table. It can be seen from the figure that there is quite an even spread over the different wards, but that the highest number of admissions were from Bellingham ward residents, and the lowest number coming from Crofton Park ward. The figure demonstrates that most of the admissions were children under 14yrs age, however due to the small number of asthma admissions, once sub divided into age groups and wards, the numbers are too small for any meaningful interpretation and should be viewed with caution.

The variation between wards could be explained by a number of different factors and it should be noted that these admissions are not known to be caused by damp, mould or cold housing.

Figure 1: Asthma admissions by Ward and Age range of Lewisham residents

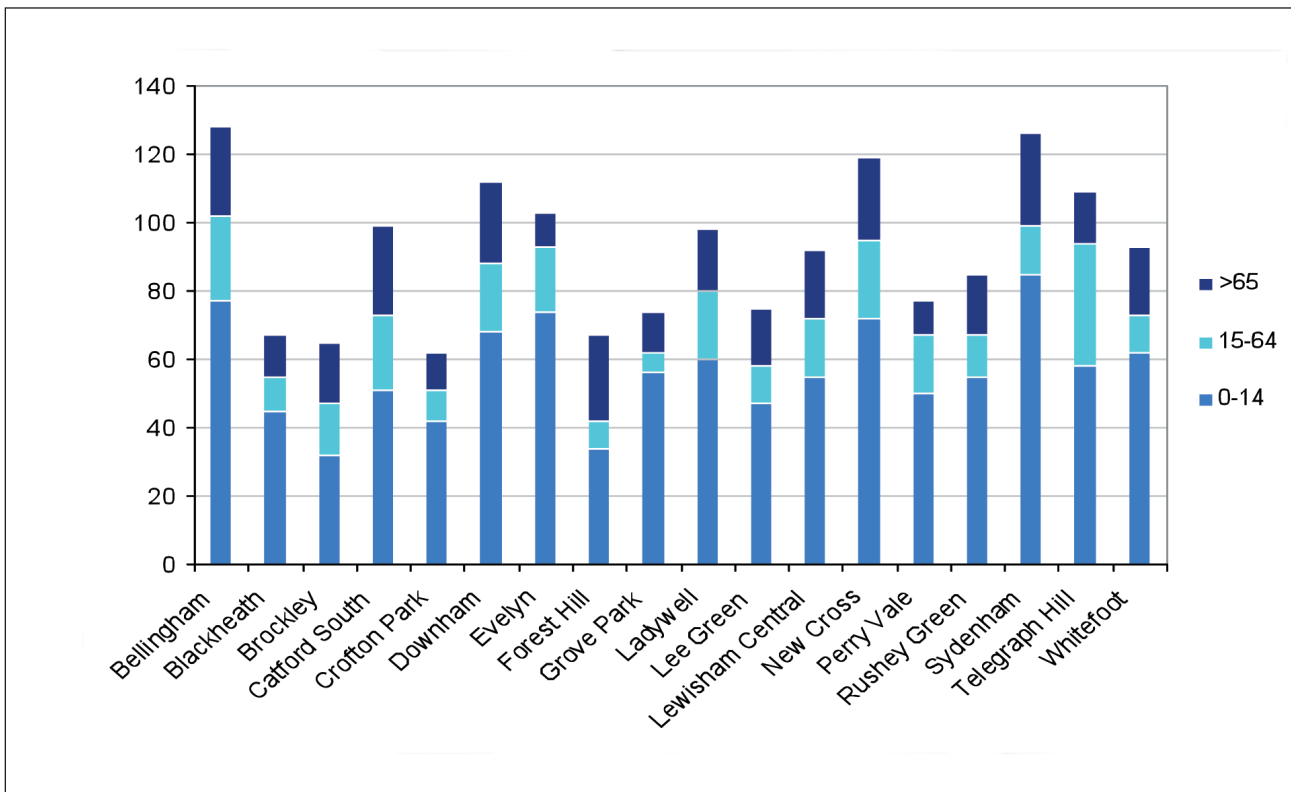


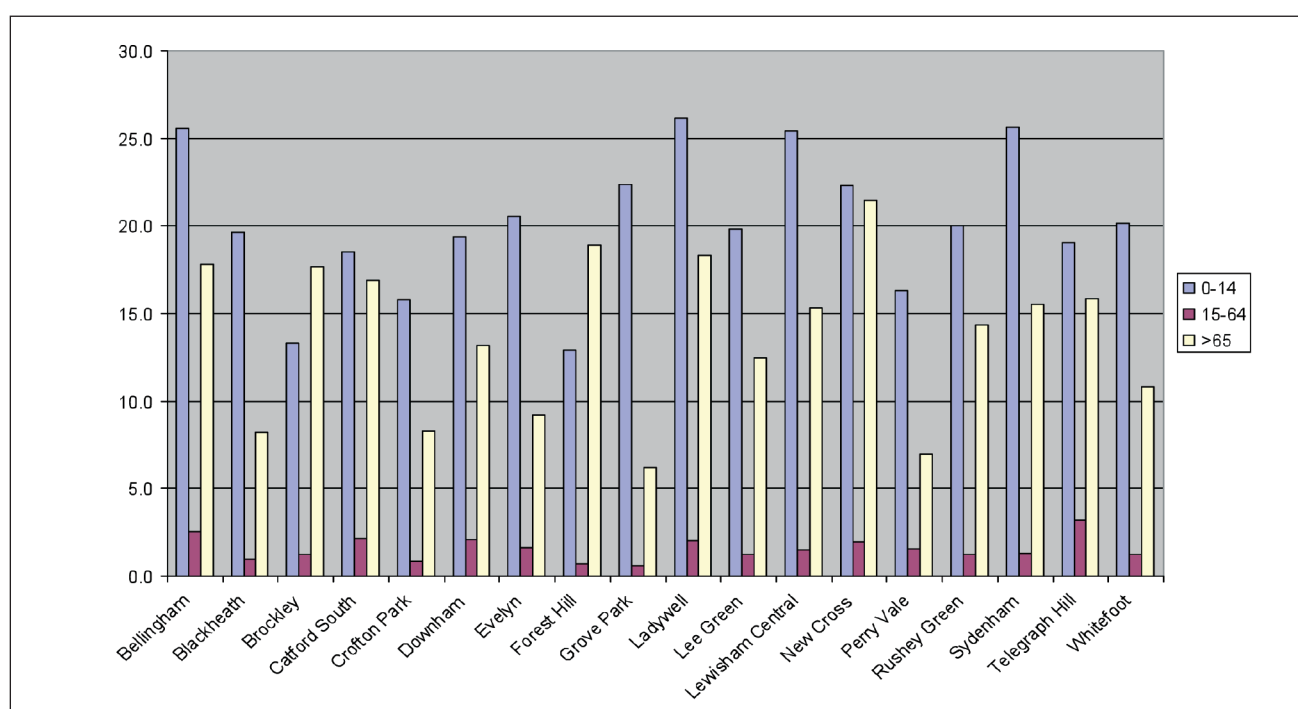
Table 3 shows the rate per 1000 Lewisham residents, of admissions to hospital with asthma. It is arranged in ascending order. It shows the rate over five years and grouped by age. It can be seen that the highest admission rate is amongst those under 14yrs old. It can be seen that the ward with the lowest IMD has the lowest rate of admissions. However, Catford South and Brockley have the same rate of admission (24.9), but Catford South has an IMD of 21.4 and Brockley of 31.4 There is no correlation between IMD and rate of admissions with asthma.

Figure 2 shows the rate of admissions to hospital for asthma from Lewisham residents, over a 5 year period by ward. Again it can be seen that most admissions are in the under 14year olds, and there is a generally even spread across wards.

Table 3: Rate of admissions from Lewisham residents over 5 years

Ward	5 year rate/1000			All ages	IMD
	0-14	15-64	>65		
Catford South	16.3	1.6	7.0	24.9	21.4
Brockley	15.8	0.9	8.3	24.9	31.4
Forest Hill	19.6	1.0	8.2	28.8	27.8
Perry Vale	22.4	0.6	6.2	29.1	30.7
Lewisham Central	20.6	1.6	9.2	31.3	34.8
Blackheath	13.3	1.3	17.6	32.2	27.1
Lee Green	20.1	1.2	10.9	32.2	23.2
Bellingham	12.9	0.7	18.9	32.5	37.6
Grove Park	19.8	1.2	12.5	33.5	27.4
Evelyn	19.4	2.1	13.2	34.7	41.0
Ladywell	20.0	1.2	14.4	35.6	23.6
Crofton Park	18.5	2.1	16.9	37.6	24.4
Downham	19.1	3.2	15.8	38.1	37.3
Rushey Green	25.5	1.5	15.3	42.2	35.6
Telegraph Hill	25.6	1.3	15.5	42.5	32.1
New Cross	22.3	1.9	21.4	45.7	36.7
Sydenham	25.6	2.6	17.8	46.0	32.1
Whitefoot	26.1	2.0	18.3	46.5	33.2

Figure 2: Rates of admissions over 5 years by ward and age



Appendix 2

Number of recorded diagnoses of asthma, by GP surgery using data collected using QOF.

The following data shows the number of recorded diagnoses of asthma, by GP surgery using data collected by Quality and Outcome Framework; a primary care performance management framework. Table 4¹⁰ shows the ward location of each surgery in addition to the patient population and number of recorded asthma diagnoses. The table is arranged in descending order, so that the GP practices with the most recorded diagnoses of asthma are at the top and going down to the least recorded numbers.

The ward which has the highest deprivation with the highest IMD score is Evelyn and then Bellingham, the lowest being Catford South and then Lee Green. GP practices with large numbers of patients with asthma are found spread across different wards. Two GP practices in Lee Green are found to have numbers of patients with asthma towards the lower end of the table. GP practices in Evelyn are also found towards the bottom of the table and therefore have low numbers of patients with asthma. There is no correlation between IMD and number of patients with asthma.

There are a number of reasons why some GP practices may have fewer number of patients recorded on their system as having asthma. For example, some GPs may be better at picking up and recording this than others, or the demographic profile of the practice population may be different.

Table 4 : Asthma prevalence from QOF data.

Asthma 1 QOF Details 2009/10				
Practice	Patients recorded	Total number of patients	Ratio	Ward
DR PAVAR	270	2398	11.30%	Whitefoot
SYDENHAM GREEN GROUP PRACTICE	1211	14057	8.60%	Bellingham
WOODLANDS HEALTH CENTRE	545	6478	8.40%	Lewisham Central
OAKVIEW FAMILY PRACTICE	348	4132	8.40%	Downham
WINLATON SURGERY	159	2044	7.80%	Whitefoot
LEE ROAD SURGERY	725	10126	7.20%	Brockley
DR SELVANATHAN'S	261	3649	7.20%	Catford south
DR RODRIGUES	714	10658	6.70%	Telegraph Hill
THE JENNER PRACTICE	1002	15112	6.60%	Crofton Park
WELLS PARK PRACTICE	602	9178	6.60%	Sydenham
BELLINGHAM GREEN SURGERY	468	7172	6.50%	Bellingham
SOUTH LEWISHAM GROUP PRACTICE	824	13772	6.00%	Whitefoot
MARVELS LANE HEALTH CENTRE	138	2297	6.00%	Grove park
ELFRIDA SURGERY	105	1789	5.90%	Lewisham Central
HONOR OAK HEALTH CENTRE	508	8984	5.70%	Telegraph Hill
THE MORDEN HILL SURGERY	498	8686	5.70%	Blackheath
DOWNHAM WAY SURGERY	233	4105	5.70%	Perry Vale
WOOLSTONE DOCTORS	421	7521	5.60%	New Cross
DOWNHAM FAMILY MEDICAL PRACTICE	359	6366	5.60%	Downham
CHINBROOK SURGERY	147	2642	5.60%	Grove park
HILLYFIELDS GROUP	703	12771	5.50%	Ladywell
THE VALE MEDICAL CENTRE	494	9201	5.40%	Perry Vale
TRIANGLE GROUP PRACTICE	419	7907	5.30%	Lewisham Central
THE LEE HEALTH CENTRE	335	6365	5.30%	Lee Green
WALDRON HEALTH CENTRE	270	5063	5.30%	New Cross
DEPTFORD MEDICAL CENTRE	112	2125	5.30%	Brockley
BARING ROAD MEDICAL CENTRE	312	5967	5.20%	Grove Park
SYDENHAM SURGERY	295	5716	5.20%	Sydenham
THE RUSHEY GREEN GROUP PRACTICE	474	9216	5.10%	Rushey Green
BELMONT HILL SURGERY	329	6389	5.10%	Blackheath
DR SARKER	107	2108	5.10%	Grove park
AMERSHAM VALE TRAINING PRACTICE	277	5710	4.90%	New Cross
ST. JOHNS MEDICAL CENTRE	576	12415	4.60%	Ladywell
BROCKLEY SURGERY	215	4868	4.40%	Brockley
NEW CROSS HC	263	6104	4.30%	New Cross
THE SURGERY	194	4496	4.30%	Telegraph Hill
LEE HIGH ROAD MEDICAL CENTRE	167	3854	4.30%	Lee Green
PENROSE LEE SURGERY	136	3158	4.30%	Lee Green
GROVE MEDICAL CENTRE	323	8120	4.00%	Evelyn
MORNINGTON SURGERY	209	5228	4.00%	Lewisham Central
DR KANDAVEL	196	4886	4.00%	New Cross
PARKVIEW SURGERY	150	3723	4.00%	Catford south
THE WALDRON HEALTH CENTRE	104	2946	3.50%	New Cross

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