

Is lack of suitable housing a barrier to DDEN home-based dialysis therapy for patients with end-stage renal disease? A cohort study

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To cite: Forbes SH. McCafferty K. Lawson T. et al. Is lack of suitable housing a barrier to homebased dialysis therapy for patients with end-stage renal disease? A cohort study. BMJ Open 2013;3:e002117. doi:10.1136/bmjopen-2012-002117

- Prepublication history and additional material for this paper are available online. To view these files please visit the journal online (http://dx.doi.org/10.1136/ bmjopen-2012-002117).
- ► Additional material is published online only. To view please visit the journal online (http://dx.doi.org/10. 1136/bmjopen-2012-002117).

Received 17 September 2012 Accepted 9 January 2013

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ABSTRACT

Objective: To determine whether inadequate housing is the main barrier to the provision of home dialysis treatment.

Design: Prospective observational study.

Participants: All patients attending a predialysis clinic between 2006 and 2009 deemed medically suitable for home dialysis and not active on the preemptive transplant list.

Setting: A predialysis clinic in a London teaching hospital.

Main outcome measure: Assessment of patient's accommodation for suitability for home-based dialysis using departmental guidelines and the Government's Housing Health and Safety Rating System regulations 2005.

Results: A lack of adequate housing prohibited the provision of home haemodialysis to all but one of these patients. Moreover, only 29% of homes assessed were suitable for peritoneal dialysis, despite the lower spatial demands of this form of renal replacement therapy. In addition to the specific requirements of dialysis, we also found that only 33% of the homes visited fulfilled the minimum standard of housing as defined in the Government's Decent Homes Standard, with multiple specific hazards identified across the properties.

Conclusions: This study illustrates that the lack of suitable housing is a major barrier to the provision of home-based dialysis and underscores the need for this to be addressed urgently at both the central government and local authority levels. We suggest that it should be considered as a major priority to rehouse medically suitable patients with a view to enabling home-based therapy.

INTRODUCTION

In 2009, the number of incident renal replacement therapy (RRT) patients in the UK was 6730, with a total of 49 080 prevalent adult patients receiving some form of RRT, broadly split as 52% undergoing dialysis and

ARTICLE SUMMARY

Article focus

- National Institute of Clinical Excellence recommends that all suitable predialysis patients should have the option of home-based dialysis.
- Only 18% of incident dialysis patients dialyse at home.
- This study set out to examine factors preventing patients from opting for home-based renal replacement therapy (RRT), with a particular emphasis on assessing environmental factors that precluded their suitability.

Key messages

- Less than 0.5% of homes assessed were suitable for home haemodialysis.
- Only 29% of homes assessed were suitable for peritoneal dialysis.
- In total, 67% of homes assessed failed the Government's minimum housing standards.

Strengths and limitations of this study

- This is a prospective study with a clearly defined population.
- The study was performed within a single centre serving an ethnically diverse population which may not be representative of all areas in the UK.
- Nonetheless, these important findings are still relevant to over 6000 patients who start RRT every year in the UK.

48% with a functioning renal transplant.¹ These figures are increasing by over 3% a year each year. Indeed, the incidence of endstage renal disease (ESRD) in the UK is higher than that of many highly publicised malignancies such as multiple myeloma and cervical cancer.

Home dialysis refers to providing dialysis either by home haemodialysis (HHD) or peritoneal dialysis (PD) in the patient's own home.

In 2002, the National Institute of Clinical Excellence UK guidelines suggested that all

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suitable patients should be offered the choice of HHD or haemodialysis in a hospital or satellite unit. Their assumption was that up to 15% of all haemodialysis patients in the UK would be suitable for home-based treatment. This form of treatment provides flexibility, independence from hospital, adaptability around employment and by virtue of much reduced transport requirements is environment friendly. It is also associated with better outcomes and is more cost-effective than in-centre or satellite-based haemodialysis. ¹

In reality what was seen, until relatively recently, was a steady decline in HHD treatment. The peak in HHD occurred in 1983 when 59% of haemodialysis patients dialysed in their own homes. There followed a continuous decline in the number of patients on home-based haemodialysis until 2003, at which point the numbers plateaued. No doubt this is reflected by an increased uptake of PD throughout the 1990s, an increase in hospital-based renal centres, in particular, satellite units and an increase in the number of patients with a functioning renal transplant, as well as a general change in the demographics of patients accepted to long-term RRT. The prevalence of HHD has increased slightly in recent years, which is especially seen when comparing figures from 2008 to 2009, but still only 645 patients in total received HHD (3% of all prevalent dialysis patients) in 2009. At present, the number of patients on HHD varies from centre to centre and, in part, will reflect differences in renal unit culture. Across the UK, HHD figures range from 0% to 11.2% of all HD patients. Very few units in the UK—six in total—have more than 5% of their dialysis patients on HHD. In terms of PD, the figures are also variable, depending on the local centre, but nationally in 2009 PD modalities made up 15.1% of the prevalent dialysis cohort, with continuous ambulatory peritoneal dialysis (CAPD) accounting for 8.1% and automated PD (APD) for 7%.

Barriers to home-based dialysis include patient frailty and comorbidity, frequent changes of address, lack of a potential partner or carer at home for support in case of emergency and inadequate housing.

With this in mind, we set out to examine factors preventing patients from opting for home-based RRT, with a particular emphasis on assessing environmental factors that precluded their suitability.

METHODS

We performed a prospective audit of the predialysis assessment home visits of 249 patients who were deemed medically suitable for home dialysis from 2006 to 2009. Patients who were expected to receive a pre-emptive transplant were excluded. The study cohort represented 40% of the incident RRT population during this period in a tertiary renal unit serving a large and diverse inner city population in East London. The ethnicity of our patients, as reported in the most recent Renal Registry report, was made up of approximately one-third white,

one-third black and one-third south Asian. This is in comparison with 78.1% white, 7.4% black and 12.3% south Asian across the rest of England. There is, of course, great variation across the UK with some reporting 0% ethnic minorities and others, including our own centre, other London centres and Bradford, reporting over 50% ethnic minorities. Up to 66% of the RRT patients in our programme are from ethnic groups despite the catchment area comprising approximately one million whites and half a million each of south Asians and people of black ancestry. This reflects the well recognised high incidence of ESRD in ethnic groups. 4 The median age of patients undergoing RRT in our centre is also slightly younger than that seen across the country with the median age being around 57 years as opposed to just over 63 years in tertiary centres in general. The younger age of our cohort reflects a higher proportion of first generation immigrant population in our catchment area.

All patients undergoing a home assessment visit had already been deemed medically suitable to receive home-based RRT using the MATCH-D criteria.⁵

MATCH-D is a US-based method used in assessing treatment choices for home dialysis. It was developed to help nephrologists to identify and assess those patients who would be suitable for home-based therapies and utilises a three-tier approach for assessing patients. The first tier is a list of triage criteria for patients who should be dialysing at home, including patient choice and ability, various lifestyle factors including employment and certain medical factors such as fluid and blood pressure control, or the desire to become pregnant. If the outcome of this triage is positive, it suggests that these patients should be strongly encouraged to pursue home-based treatment. The second tier suggests solutions for common barriers that prevent home treatment such as patient education, resolution of hygiene issues, space for supplies and quality of water supply. The final tier presents contraindications to home dialysis listing environmental problems such as homelessness, no or unreliable electricity supply, a home which is a health hazard and patient factors such as uncontrolled psychosis or seizure disorder, brain damage or dementia, resulting in reduced awareness or ability to report symptoms. Thus, in the latter two tiers, there are clear references to environmental factors, and we focused our investigation on these areas.

At each home visit, several factors were assessed that were relevant to home-based dialysis. These included spatial factors, housing type and condition, accessibility to the property and, finally, public health and hygiene factors. Initially, a statutory Housing assessment was required under the Housing Health and Safety Rating System (HHSRS) (England) Regulations 2005, which lists 29 factors which must be fulfilled as the minimum criteria for the home to be deemed fit for human habitation. It should be noted that these regulations are quite explicit, user-friendly and do not require formal training. The HHSRS consolidates what was previously a

wide range of complex housing and public health legislation into a very understandable matrix. Our own checklist is very easy to use. We also make much use of photographic evidence which can facilitate applications for rehousing/remedial/enforcement action with Local Authorities and Community Health Services. This system could easily be used by other units, in which case it could provide real-time evidence nationally in respect of medical housing needs (see online supplementary appendix for full HHSRS and DHS documents, which are the statutory national assessment guidelines, as well as a copy of the crib sheet used for each home assessment). Thereafter, we looked at requirements specific to the different modalities of home dialysis.

Requirements for HHD included a separate room with a bed or a couch, a clear space of at least 6'×6' (1.8 m×1.8 m), ideally adjacent to a mains water supply, with an external drain pipe and a minimum ceiling height of 8' (2.4 m). The water supply had to be capable of providing at least 40 l/h directly from the mains supply and with the appropriate water pressure. There was also a requirement for a total unallocated space (preferably within the accommodation) of $6' \times 6'$ (1.8 m×1.8 m) for storage of consumables and disposables. Due to siphoning and suction problems, HHD does not work well in the upper floors of tower blocks. Elevation of the accommodation was not specifically considered as a significant factor in the determination of general housing suitability. For APD, the spatial requirements were lesser, requiring sufficient space of 2.8'×2.8' $(0.85 \text{ m} \times 0.85 \text{ m})$ (preferably in the bedroom), to accommodate an APD machine and a total unallocated space (preferably within the accommodation) of $5' \times 5'$ $(1.5 \text{ m} \times 1.5 \text{ m})$ for dialysate and disposables. Finally, for CAPD, there needed to be sufficient space $(4' \times 4')$ (1.2 m×1.2 m) to accommodate a sitting person doing a PD exchange with the same total unallocated storage space as for APD. Both PD modalities required access to either a sink or a drain. For accessibility, there was a requirement for a working lift, or the accommodation had to be on a low level. In some circumstances, the installation of APD/CAPD necessitated some marginal inconvenience to the occupants of the household; for example, risk of tripping or falling hazards, compromised escape routes and exacerbation of overcrowding. Such houses were considered barely suitable for APD/ CAPD, although treatment did proceed.

RESULTS

The demographics of patients assessed are set out in table 1. They represented a broad range of ages and races, typical of the population that our renal unit serves. First, the occupant's home was assessed against the Government's Decent Homes Standard, and it was found that only 33% of the homes visited fulfilled this minimum standard. It was then assessed as to whether there were any factors in the home which were hazardous to their health

Table 1 Patient demographics	
Sex	
Male	141 (57%)
Female	108 (43%)
Age (median (IQR))	53 (40–68)
Range	22-90
Race	
White	65
Black	82
Indo-Asian	84
Chinese	5
Other	13
Diabetic	
Yes	94 (38%)

and well-being, as defined in the Government's HHSRS (England) Regulations 2005. These regulations comprise 29 specific hazards which range widely from damp and mould growth to overcrowding and lack of space, to inadequate facilities for maintaining personal hygiene, sanitation, drainage and risk of structural collapse of the building. For the purposes of this report, up to four hazards were listed for any one home at the time of visit. These are summarised in table 2.

Table 2 Hazards scored according to the Housing Health and Safety Rating System regulations (England) 2005

Hazard	Number of homes scoring (%)
Overcrowding and lack of space	143 (57.4)
Damp and mould growth	81 (32.5)
Inadequate facilities for maintaining personal hygiene, sanitation and drainage	43 (17.3)
Risk of structural collapse and falling elements of the building	24 (9.6)
Inadequate domestic hygiene, pests and refuse	20 (8)
Inadequate facilities for storing and preparing food	20 (8)
Inadequate supply of uncontaminated water	9 (3.2)
Electrical hazards	8 (3)
Falls associated with bathing/ washing/toileting	6 (2.4)
Risk of falling on stairs	5 (2)
Excess heat	2 (0.8)
Lead	1 (0.4)
Risk of falling on level surfaces	1 (0.4)
Asbestos and MMF (manufactured mineral fibres)	1 (0.4)
Risk of falling between levels	1 (0.4)
Carbon monoxide and fuel combustion products	1 (0.4)
Position and operability of equipment/amenities	1 (0.4)
Uncombusted fuel gas	1 (0.4)

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We also noted whether the premises were let by a private landlord or to a local authority for use as temporary accommodation for homeless families and found that 171 of the homes visited (69%) were such houses.

In terms of assessing suitability for home-based therapy, from these consecutive 249 home assessments we found that 70% were not suitable for either PD or HHD. Only 29% were deemed barely suitable for PD on spatial grounds. The reason for homes being unsuitable related entirely to spatial and health and safety concerns. Our experience is that although many families will accept compromises to their quality of life and lifestyles to facilitate the spatial demands of home RRT, these can seriously impact those particularly in overcrowded or poor quality accommodation and substantially increase the potential for accident and injury. Hence our 'barely suitable' category. We strive for the best for our patients and their families and aim to ensure that their safety is not compromised by the home dialysis process. However, during the period of the study, we had a case of a 5-year-old child, who sustained serious head injuries when a large stack of PD boxes collapsed upon him, and various cases of sequential joist failure resulting in floor collapse due to floor loadings being exceeded due to the weight of PD storage. Just one home visit resulted in a patient being considered for and starting home haemodialysis (see figure 1).

DISCUSSION

The idea of home-based dialysis treatment is not new. Several groups claim to have been the first to start HHD, including Shaldon in 1964 in the Royal Free Hospital and Nose (Haikado group) in his PhD thesis of 1962. In addition, Boen *et al* 9 set up a PD programme in 1960 that was designed to allow people to dialyse at home.

RRT consumes 1–2% of the total National Health Service budget (although ESRD only affects 0.05% of the general population), so in addition to patient choice there are also financial implications in the choice of RRT for patients with ESRD. In the current financial

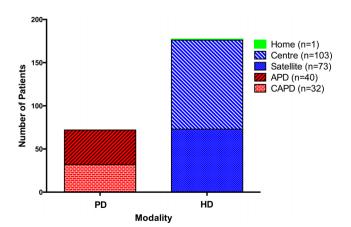


Figure 1 Dialysis modality following home visit.

climate, the department of health working unit has encouraged home-based treatment as being potentially both more cost effective and providing better outcomes. Studies looking at both the physiological and financial benefits of home-based RRT have suggested that HHD provides more treatment hours at a lower cost. In addition, CAPD (£15 570 mean annual cost) is widely recognised to be the most cost-effective modality of RRT, followed by HHD (£20 764) and APD (£21 655), compared with either satellite (£32 669)-based or hospital (£35 023)-based haemodialysis. 10

In addition to the financial argument, it is clear that home-based dialysis confers many wider advantages over hospital-based treatment in suitable patients. 11 It offers greater autonomy for patients, giving them increased independence, responsibility and confidence and an enhanced quality of life. 12 13 More importantly, it reduces the considerable costs and environmental impact of 156 round trips to their dialysis centre, and it must be emphasised that the quoted costs for centre and satellite haemodialysis do not include transport costs. It is notable that the reduced carbon footprint due to reduction in patient transportation, however, may be offset by the increased frequency of home haemodialysis sessions. 14 In addition, HHD provides the patient with sufficient flexibility to schedule their dialysis such that employment prospects are not adversely affected and younger, fitter patients are able to hold down fulltime employment. There is also evidence that, at least in the case of HHD, it offers an opportunity for better rehabilitation and lower infection risks. Ultimately, it contributes to better long-term survival. 15 In addition, there is evidence that short daily or nocturnal sessions of haemodialysis can result in improved blood pressure control, reduced left ventricular mass, better control of anaemia and hyperphosphataemia and more effective removal of middle molecular weight substances. 16-21 Yet it is underused both in the UK and globally.²²

Previously, multiple reasons have been suggested for the reduction in the use of home dialysis, including an older dialysis population, with a greater burden of comorbidities, especially diabetes. Inadequate patient education, limited exposure of nephrologists, nursing staff and social workers to home-based therapies and lack of available programmes have also been mooted as reasons for the decline. ²³

We have demonstrated, however, that even with a willing clinical team and an existing home therapy programme within a large teaching hospital serving an inner city population, the use of either HHD or PD is not a viable option for the majority of medically suitable patients.

This study highlights that the single most important barrier to achieving higher rates of home-based treatment among medically appropriate dialysis patients is the suitability of their home environment. It is apparent that there is a considerable and increasing shortage of appropriate housing, even to support the relatively low spatial requirements of PD. Indeed, within our cohort, there was only one home suitable to support home haemodialysis. In a poor inner city environment, it is clear that despite up to 40% of incident RRT patients being suitable medically for home dialysis, the condition of the housing stock is such that this form of treatment is precluded in the vast majority of instances. With the increasing housing demands in such an area, influenced by the changing demographic, single occupancy households, the economic climate and the new social welfare bill passed in parliament, the reality is that the ability to offer home-based treatments will be further compromised. In fact, there is already evidence that our catchment area is facing the biggest housing crisis since the 1930s with many households classified as overcrowded, a significant number of homes classified as unfit for human habitation and many affordable new homes, which were scheduled to be built, abandoned due to budget cuts. Already 35 920 families in London are in temporary accommodation, while an estimated 207 000 households in the capital are 'statutorily overcrowded' (comprising around 7% of London households, and as compared with 630 000 households throughout England), around half of which are social rented housing. 24-26 Although London and Scotland have a significantly higher proportion of overcrowded houses than any other region in the UK, with 17% and 12%, respectively, overcrowding does remain a significant problem across the country, averaging approximately 5% of households nationally.²⁷

A similar picture exists nationwide with regard to suitability of housing stock. Currently, over 33% (7.4 million) of English homes do not meet the UK Government 'Decent Homes Standard', while a further 4.8 million homes were identified to be potentially seriously hazardous to their occupants. ²⁵ ²⁸ ²⁹ Regionally, the proportion of homes in England classified as non-decent varies from about 40% in the south-west to less than 25% in the north-east, with London in the middle of the range at 33%. ³⁰ The proportion of non-decent homes is significantly higher in rural areas, where approximately 50% of homes in the most rural areas are classified as non-decent, compared with about 30% in small towns and urban areas. ³⁰

The criteria used in the current study to assess the suitability of houses for home-based RRT could be viewed by some as too rigid. However, despite using the definitions of the evaluation tools with flexibility and common sense, many houses still failed on the bare minimum criteria of decent living standards. In fact, there is little in the way of national or international guidelines regarding the exact environmental standards necessary for home-based dialysis. Neither is there any set national methodology with regard to housing assessment for RRT, who this is done by or if it needs to be done at all. Some units do not assess any homes, whereas some assess some homes based upon their own local criteria. Perhaps the development of national

documents and standards would more clearly define the necessary requirements and the process of assessing homes, thus facilitating the start of home-based therapy, or indeed aid in the process of rehousing in appropriate circumstances.

These statistics have obvious negative implications for the growth of home-based dialysis treatment as the ideal form of the UK RRT for suitable patients. It would appear that the UK Government's desire to substantially increase home dialysis provision and, specifically, HHD provision may be unrealistic with the current housing stock throughout the UK. Our findings are applicable to many parts of the country.

Poverty, social deprivation and differences in ethnicity between rural and urban populations lead to a greater demand for renal services in urban areas throughout the UK, not just in London. Moreover, the healthcare challenges associated with the increasing urbanisation are not limited to the UK. In 2008, the United Nations reported that for the first time in history more than 50% of the world's population were living in urban settlements.³¹ Combined with the rapidly increasing worldwide prevalence of chronic kidney disease, driven by an explosion in the prevalence of hypertension, obesity and diabetes in the developing world, this means that the message highlighted here will be of great interest to nephrologists, health economists and patients across the globe.

In conclusion, it is clear that home-based methods of RRT, although widely agreed to be both largely better for patients and more cost effective, are severely underused in the UK. In particular, we highlight that environmental factors are a huge barrier to the start of HHD and even PD, particularly in inner city areas, and to a lesser extent nationwide. Housing resources and the current shortfall in planned affordable house building will continue to compromise our ability to offer home dialysis therapies for the foreseeable future with consequent increase in RRT costs and the removal of patient choice in many instances.

Contributors MY and MR conceived the idea of the study. MY, MR and SF were responsible for the design of the study. SF and KM were responsible for undertaking the data analysis and produced the tables and graphs. SF, KM, MR and MY provided input into the data analysis. The initial draft of the manuscript was prepared by SF and was then circulated repeatedly among all authors for critical revision. TL and MS were responsible for the acquisition of the data, with additional design and production of the HHSRS checklist by TL. MY, SF, KM and MR contributed to the interpretation of the results.

Funding This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement No additional data are available.

REFERENCES

- The Renal Association UK Renal Registry Thirteenth Annual Report 2010
- National Institute for Clinical Excellence. Guidance on home compared with hospital hemodialysis for patients with end-stage renal failure. Technology Appraisal Guideline No 48, 2002. http://

Lack of suitable housing: a barrier to home-based dialysis therapy for patients

- www.nice.org.uk/nicemedia/pdf/HvH_full_guidance.pdf (accessed Sept 2012).
- Blagg CR. Home hemodialysis; 'home, home, sweet, sweet home!'. Nephrology 2005;10:206–14.
- Roderick PJ, Raleigh VS, Hallam L, et al. The need and demand for renal replacement therapy amongst ethnic minorities in England. J Epidemiol Comm Health 1996;50:334–9.
- Method to Assess Treatment Choices for Home Dialysis (MATCH-D) 2009. http://www.homedialysis.org (accessed Sept 2012).
- Housing Health and Safety Rating System (HHSRS) [England] Regulations 2005. http://www.communities.gov.uk/documents/ housing/pdf/150940.pdf (accessed Sept 2012).
- 7. Baillod RA, Comty C, Ilahi M, et al. Overnight hemodialysis in the home. Proc Eur Dial Transplant Association 1965;2:99–103.
- Nose (Hokkaido group). Home hemodialysis: a crazy idea in 1963: a memoir. ASAIO J 2000;46:13–17.
- Boen ST, Mulinari AS, Dillard DH, et al. Periodic peritoneal dialysis in the management of uremia. Trans ASAIO 1962;8:256–65.
- Baboolal K, McEwan P, Sondhu S, et al. The cost of renal dialysis in a UK setting—a multicentre study. Nephrol Dial Transplant 2008:23:1982–9.
- 11. Blagg CR. Home hemodialysis. BMJ 2008;336:3.
- Morris PL, Jones B. Life satisfaction across treatment methods for patients with end-stage renal failure. Med J Aust 1989;150:428–32.
- McFarlane PA, Bayoumi AM, Pierratos A, et al. The quality of life and cost utility of home nocturnal and conventional in-center hemodialysis. Kidney Int 2003;64:1004–11.
- Connor A, Lillywhite R, Cooke MW. The carbon footprints of home and in-center maintenance hemodialysis in the United Kingdom). Haemodial Int 2011;15:39–51.
- Saber E, Nithsch D, Descoeudres C, et al. Outcomes of home hemodialysis patients: a case-cohort study. Nephrol Dial Transplant 2005;20:604–10.
- Chan CT, Jain V, Picton P, et al. Nocturnal hemodialysis increases arterial baroreflex sensitivity and compliance and normalizes blood pressure of hypertensive patients with end-stage renal disease. Kidney Int 2005;68:338–44.
- Culleton BF, Walsh M, Klarenbach SW, et al. Effect of frequent nocturnal hemodialysis vs conventional hemodialysis on left ventricular mass and quality of life. A randomized controlled trial. J Am Med Assoc 2007;298:1291–9.
- The FHN Trial Group. In-center hemodialysis six times per week versus three times per week. N Engl J Med 2010;363:2287–300.

- Schwartz DI, Pierratos A, Richardson RMA, et al. Impact of nocturnal home hemodialysis on anemia management in patients with end-stage renal disease. Clin Nephrol 2005;63:202–8.
- Achinger S, Ayus JC. The role of daily dialysis in the control of hyperphosphatemia. Kidney Int 2005;67:S28–32.
- Pierratos A. Effect of therapy time and frequency on effective solute removal. Semin Dial 2001;14:284

 –8.
- Department of Health. The expert patient: a new approach to chronic disease management in the 21st century. 2001. http://www.dh.gov. uk/en/Publicationsandstatistics/Publications/PublicationsPolicy AndGuidance/DH_4006801 (accessed Sept 2012).
- Chesterton LJ, Fluck RJ. Home dialysis therapies—peritoneal dialysis and home haemodialysis working together. Eur Nephrol 2011;5:41–4.
- 'Statutory Homelessness-Households in Temporary accommodation in London and England at the end of each Quarter 1998–2011.' Department for Communities and Local Government Live Tables. December 2011. http://www.communities.gov.uk/documents/ statistics/pdf/2102020.pdf (accessed Sept 2012).
- 'English Housing Survey-Headline Report 2009–2010.' Department for Communities and Local Government. February 2011. http://www. communities.gov.uk/documents/statistics/pdf/1851086.pdf (accessed Sept 2012).
- 'Crowded Houses-Overcrowding in London's Social Rented Housing' London Assembly. March 2011. http://www.london.gov.uk/ moderngov/mgConvert2PDF.aspx?ID=3149 (accessed Sept 2012).
- 2001 Census Office of National Statistics. http://www.ons.gov.uk/ ons/guide-method/census/census-2001/index.html (accessed Nov 2012).
- 'A Decent Home: Definition and Guidance for Implementation' Department for Communities and Local Government. June 2006. http://www.communities.gov.uk/documents/housing/pdf/138355.pdf (accessed Sept 2012).
- English Housing Condition Survey-Housing Stock Report 2009' Department for Communities and Local Government. November 2011. http://www.communities.gov.uk/documents/statistics/pdf/ 19372481.pdf (accessed Sept 2012).
- 'English Housing Survey 2010 to 2011; household report'.
 Department of Communities and Local Government. July 2012.
 https://www.gov.uk/government/publications/english-housing-survey-household-report-2010-to-2011 (accessed Nov 2012).
- 31. Lahariya C. The state of the world population 2007: unleashing the potential of urban growth. *Indian Pediatr* 2008;45:481–2

Department for Communities and Local Government

A Decent Home: Definition and guidance for implementation

June 2006 - Update

A Decent Home: Definition and guidance for implementation

June 2006 – Update

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Printed in the UK on material containing no less than 75% post-consumer waste.

June 2006

Product Code 06HC03962

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Introduction

- 1.1 This guidance replaces *A Decent Home: The definition and guidance for implementation* published in February 2004. It has been issued to accompany the launch of the final Decent Homes bidding round for the Round 6 Arms Length Management Organisations (ALMOs) and the 2006 Housing Transfer Programme. The guidance explains a number of Decent Homes policy amendments and seeks to clarify issues that have arisen in the implementation of the programme.
- 1.2 Tremendous progress has been made in delivering the Decent Homes programme, with over half the task being completed and with the last few local authorities putting in place their programmes for delivery. The Decent Homes programme has already made a real difference to the lives of tenants by not only making improvements to social housing but also through improved services. By the time we get to 2010 we expect that, around 3.6 million homes will have had work carried out to them, many more than the 2.2 million non-decent homes we started with in 1997. This additional work will have prevented many homes becoming non-decent, and will have dealt with those that fell below decent between 1997 and 2010.
- 1.3 In revising this guidance, the Department for Communities and Local Government (DCLG formerly the Office of the Deputy Prime Minister or ODPM) is setting out how it sees social landlords building on the success of the programme working more flexibly to go beyond the Decent Homes programme to undertake more radical solutions to transform some of the poorest neighbourhoods into mixed, sustainable communities.
- 1.4 A number of local authorities and RSLs have already adopted a mixed communities approach. New homes are being built alongside those that are refurbished and landlords are expanding housing opportunities within communities to enable people to move home without moving out of their community. All engaged in this transformation know it takes time to get it right; major change cannot be achieved in a few years. We believe local delivery agencies need to ensure they are pursuing a mixed communities approach alongside decent homes.
- 1.5 We also want to encourage local authorities ALMOs and RSLs to ensure they are considering the need for new build in their area alongside decent homes, including the use of section 106 and local authority land as well as social housing grants.
- 1.6 Delivery agencies need to continue to ensure they are getting value for money and meeting the high performance standards expected of the programme. Crucial to this is the continued involvement and empowerment of local tenants.

Key points

2.1 This section sets out some of the key amendments to Decent Homes policy that all those involved in the delivery chain should be aware of. Where relevant, reference is made to other sections of the guidance for more detail.

Community-based and tenant-led ownership and management

- 2.2 Involving tenants in the options appraisal process and the implementation of the chosen option has seen real benefits. Tenants are now offered the opportunity to become much more involved in making decisions about the management and ownership of their homes.
- 2.3 The Government wishes to build on this and encourage local authority tenants to explore future options for the ownership and management of their homes. Tenants' groups may apply for funding to explore the feasibility and implementation of future options from the Tenant Empowerment Programme (TEP), administered for the Department by the Housing Corporation. To be eligible to apply for the funding, the options to be explored and implemented must be community-based and the outcome must be tenant-led.
- 2.4 Housing Stock Transfer encourages as wide a range of transfers as possible, including to small/and or community-based landlords who offer new and innovative approaches such as using the Community Gateway Model. Government attaches great importance to empowerment and ownership at a local level. Where a tenant's group, including those in management co-operatives, TMOs and tenant's associations put forward any proposal we would expect an authority to consider it seriously.
- 2.5 We particularly want to encourage community owned options in the final bidding round. Therefore we are promoting consideration of options such as Community Gateway, community mutual approach and community land trusts as additional ways to meet the Decent Homes target and go beyond the Decent Homes target in the future.
- 2.6 We will also consider extensions to the July 31 bidding deadline for areas wishing to develop a community owned model and who need more time to complete their bid.

Delivering Decent Homes Beyond 2010

2.7 The Decent Homes programme has made, and is continuing to make, excellent progress. The vast majority of social landlords will be expected to ensure all homes are decent by 2010.

2.8 The Department expects 95 per cent of all social housing to be decent by 2010 and the remainder to be improved as fast as possible after that date. The majority of local authorities and RSLs should not expect to change their timetables for delivery. However, for a small minority of homes, it may make sense to continue beyond 2010 in order to deliver value for money or achieve wider objectives. Therefore, we will be prepared to negotiate individual delivery timescales for a minority of areas where there are strong reasons to extend the work.

Delivering mixed communities

- 2.9 In many areas the Decent Homes programme has already made a real difference to the lives of tenants by improvements to essentially good quality housing alongside improved services, helping to create sustainable mixed communities. We recognise that the Decent Homes programme needs to support the creation of decent communities. But more radical solutions are required to transform some of the poorest neighbourhoods. A number of local authorities and RSLs have already embarked on transforming such areas into mixed communities, harnessing the impetus of the Decent Homes programme and the better use of their assets alongside other funding streams.
- 2.10 We do not want the Decent Homes deadline to prevent local authorities and RSLs delivering more transformational progress on major estates where there are wider options to increase regeneration and deliver more mixed communities. Therefore in these areas we will consider whether work needs to be extended beyond 2010.

Procurement value for money

- 2.11 We will also consider sympathetically extensions to the 2010 deadline for those areas where accelerated delivery may reduce value for money. In some areas, a shortage of supply might otherwise combine with a spike in demand to push up prices or reduce quality. By 'smoothing' demand over a longer period, often in co-ordination with other social landlords in the area, it may be possible to secure better deals and to increase supply side efficiencies.
- 2.12 Landlords seeking to extend the deadline in order to get better value for money should have a procurement strategy in place which includes relevant market information and which sets out the benefits of a longer timescale. We would expect all such strategies to include consideration of opportunities to procure works collectively with others, using consortia arrangements.

Late start or delivery issues

- 2.13 Those ALMOs which are late starting the programme and also those where there have been performance difficulties will have individual timetables negotiated on the basis of their local circumstances.
- 2.14 The National Federation of ALMOs has put in place a framework to provide for coaching and mentoring of new ALMOs. Existing high performing ALMOs are working on a voluntary basis with new ALMOs to help them put in place a robust system to deliver quality services to tenants.

2.15 For PFI programmes and stock transfers which are commencing late in the programme we will consider the individual circumstances in order to agree realistic timetables.

Process and time frame for renegotiating

- 2.16 The Department will be approaching authorities where it considers individual timetables may be necessary. If a local authority or RSL believes it has a valid case for renegotiating their deadline for delivery, they will need to be able to demonstrate this. The chosen delivery route and at what point they are in the delivery process will determine with whom they negotiate.
- 2.17 All local authorities intending to apply for a place in the 2006 bidding round will negotiate directly with the relevant Decent Homes programme team at DCLG, as will all those already on a programme. Established RSLs will negotiate directly with the Housing Corporation, and local authorities that have opted for retention will negotiate with their local Government Office.
- 2.18 Ninety five per cent of all social housing should be decent by 2010. And we expect delivery agencies overall to have refurbished over 3.6 million homes and delivered a 90 per cent reduction in the number of non-decent homes by 2010. We expect to be clear which local authorities and RSLs will complete decent homes beyond 2010 by April 2007. Any who wish to make a case to extend their deadlines must also do so by this date.

Housing Health and Safety Rating System

- 2.19 The Housing Health and Safety Rating System (HHSRS) came into effect on 6 April 2006 and replaces the fitness standard as the statutory element of the Decent Home Standard. However, HHSRS is a risk assessment procedure and does not set a standard.
- 2.20 To be decent, a dwelling should be free of category 1 hazards, and the existence of such hazards should be a trigger for remedial action unless practical steps cannot be taken without disproportionate expense or disruption. Landlords should consider the circumstances very carefully in the interests of the occupiers of the dwelling before concluding that a hazard cannot be dealt with effectively, and in such cases should ensure that the occupiers are fully aware of the position.
- 2.21 HHSRS must be incorporated in housing stock condition surveys and information on the components of the HHSRS and how they can be measured have been in the public domain since August 2000. More details about the HHSRS may be found in Sections 4 and 5 below.

Delivering decent homes – Part of a wider strategy for regeneration

- 3.1 Delivering decent homes is a commitment in the national strategy for neighbourhood renewal and has a key role to play in narrowing the gap between deprived neighbourhoods and the rest of the country. Delivery needs to be part of a holistic approach to regeneration which is about more than just 'bricks and mortar' and which makes the right linkages to wider regeneration objectives such as improving health and education outcomes, renewing failing housing markets, tackling poverty and delivering mixed sustainable communities.
- 3.2 The following issues should be considered in delivering decent homes:
 - investment in decent homes should take place in neighbourhoods with sustainable demand in the long-term;
 - expenditure on decent homes needs to be informed by a good understanding of the housing market – particularly in areas suffering from low housing demand. Where demand for housing is not sustainable in the long-term, demolition of the existing stock may represent a better option than refurbishment; and
 - where wider regeneration is an issue, the delivery of decent homes should form part of a wider strategy for neighbourhood renewal and the creation of mixed sustainable communities.
- 3.3 Investment in decent homes can help to maximise the impact of regeneration spending funded from other sources and regeneration spending can help to satisfy tenant priorities and ensure that decent homes are located within sustainable neighbourhoods. The delivery of decent homes should work towards regeneration priorities identified in community strategies and local neighbourhood renewal strategies and should be co-ordinated with other regeneration initiatives such as low demand pathfinders and New Deal for Communities schemes. Housing providers should engage in efforts to deliver local regeneration priorities, provided that lenders are satisfied that this does not create inappropriate risks to the social housing assets.
- 3.4 Local Area Agreements (LAAs) are expected to be a major tool in delivering neighbourhood renewal. Any LAA area in receipt of NRF must include six mandatory neighbourhood renewal outcomes, including the following housing outcome:

As part of an overall housing strategy for the district, improve housing conditions within the most deprived neighbourhoods/wards, with a particular focus on ensuring that all social housing is made decent by 2010 or other renegotiated deadline.

3.5 Delivery of decent homes should be seen as part of a wider goal to improve public service delivery and the standard of living for vulnerable people and disadvantaged groups. It makes a major contribution to wider objectives by tackling fuel poverty, reducing health inequalities and addressing child poverty. Decent Homes' implementation should be linked to delivery of these wider objectives. Local Strategic Partnerships have a key role to play in bringing together local stakeholders to facilitate joined-up delivery.

Decent homes and mixed communities

What is a mixed community?

- 3.6 A mixed communities' approach aims to create better outcomes for the most vulnerable in society and sustainable communities for all. There is no 'one size fits all' approach and how mixed communities are developed will depend on the local context. However, **mixed communities** are areas that:
 - attract and retain households with a wide range of incomes;
 - have good quality housing in attractive environments with access to good local schools and retail/leisure facilities and other services such as health;
 - have a mix of housing size, type and tenure;
 - attract and retain households with choice;
 - have strong local economies and contribute to strong regional economies;
 - are well connected to employment opportunities through neighbourhood design, transport and job access services;
 - provide access to other economic and social opportunities for all residents, enhancing their life chances;
 - have high quality housing and neighbourhood management;
 - have low levels of crime and provide support services for vulnerable people and families at risk;
 - have a strong housing market that matches the wider economic area; and
 - attract and utilise private sector investment.

Outcomes of a mixed community approach

- 3.7 A successful mixed community would bring together the economic, social and physical aspects of renewal and development in a holistic manner to result in:
 - high quality homes, services and opportunities for all;

- narrowing of the gap between the most disadvantaged areas and the rest [floor target outcomes as key indicators]; and
- de-concentration of deprivation, and prevention of social and economic segregation in new areas of development.

Decent homes, neighbourhood renewal and sustainable communities, through a mixed communities approach

3.8 The Decent Homes programme has already made a real difference to the lives of tenants by not only making improvements to social housing but also through improved services. The Decent Homes programme now also offers an opportunity for local authorities to undertake more radical solutions to transform some of the poorest neighbourhoods into mixed, sustainable communities. Those local authorities currently engaged in, or wishing to pursue, major transformation via a mixed communities approach will be able to renegotiate with the Department's individual deadlines for completion beyond the 2010 deadline.

3.9 Solutions could:

- be an integral component of its area's broader Sustainable Communities Strategy;
- have identified sources of funding;
- build on the work that local authorities with tenants have already done in deciding the most appropriate delivery route for meeting decent homes;
- engage residents and establish representative, accountable governance systems to
 ensure inclusive, active and effective participation by individuals, organisations and
 service delivery agents;
- challenge developers and other organisations to deliver high quality, tenure-blind designs that will attract residents with choice;
- ensure physical regeneration leads to attractive well-planned and good quality environments by understanding the local context (using tools such as design coding etc.); and
- ensure local plans highlight the links between physical, social and economic regeneration so local housing needs are understood within the wider community context.

A decent home - summary of the definition

Introduction

- 4.1 The definition of what is a decent home has been updated to reflect the Housing Health and Safety Rating System (HHSRS) which replaced the Housing Fitness Standard on 6 April 2006. Landlords will find it helpful to refer to the two volumes of statutory guidance on HHSRS¹. The general principles of application have been expanded as set out in paragraph 4.4 below and paragraphs 4.5 and 4.6 clarify what properties are covered by the Decent Home standard. A decent home meets the following four criteria:
 - a) It meets the current statutory minimum standard for housing
- 4.2 Dwellings which fail to meet this criterion are those containing one or more hazards assessed as serious ('Category 1') under the HHSRS.
 - b) It is in a reasonable state of repair
- 4.3 Dwellings which fail to meet this criterion are those where either:
 - one or more of the key building components are old and, because of their condition, need replacing or major repair; or
 - two or more of the other building components are old and, because of their condition, need replacing or major repair.
 - c) It has reasonably modern facilities and services
- 4.4 Dwellings which fail to meet this criterion are those which lack three or more of the following:
 - a reasonably modern kitchen (20 years old or less);
 - a kitchen with adequate space and layout;
 - a reasonably modern bathroom (30 years old or less);
 - an appropriately located bathroom and WC;
 - adequate insulation against external noise (where external noise is a problem); and
 - adequate size and layout of common areas for blocks of flats.

¹ Housing Act 2004, Part 1. Statutory Guidance has been given to local authorities under section 9 – the HHSRS Operating Guidance and Enforcement Guidance – and is available from DCLG and at www.communities.gov.uk/hhsrs

- 4.5 A home lacking two or fewer of the above is still classed as decent, therefore it is not necessary to modernise kitchens and bathrooms if a home meets the remaining criteria.
 - d) It provides a reasonable degree of thermal comfort
- 4.6 This criterion requires dwellings to have both effective insulation and efficient heating. It should be noted that, whilst dwellings meeting criteria b, c and d are likely also to meet criterion a, some Category 1 hazards may remain to be addressed. For example, a dwelling meeting criterion d may still contain a Category 1 damp or cold hazard.

General principles of application

- 4.7 When applying the Decent Home standard, social landlords should consider the wider mixed communities schemes and regeneration programmes, and follow environmental sustainability objectives and the Buildings Regulations. Social landlords should bear in mind the following. More detailed advice on implementing the standard is given in Section 6:
 - Decent homes must be sustainable in the long-term. Decisions on which homes to
 invest in must be made in the context of the long term demand for the stock. Decent
 Homes work should not be undertaken in isolation from wider mixed-communities
 schemes and regeneration programmes;
 - It is a minimum standard that all social housing should meet by 2010 or other renegotiated deadline and which can be measured consistently across all social housing stock;
 - It is a standard that triggers action, not one to which work is necessarily carried out;
 - Landlords are not expected to make a home decent if this is against a tenant's wishes as work can be undertaken when the dwelling is next void (see paragraph 6.11). For reporting purposes, these properties are not counted as non-decent until they are void;
 - Landlords should have regard to Government environmental sustainability objectives in specifying and designing works and components in maintenance programmes;
 - Landlords must comply with the current Building Regulations, guidance for which is available on the DCLG website², when carrying out works to which they apply, and in general should use the Regulations as a guide as far as possible;
 - Landlords are not expected to carry out only that work which contributes to making homes decent. Other factors may be considered:
 - Building components may fail early, typically these should be dealt with on a responsive basis;

² Building Regulations Explanatory Booklet is available at: http://www.communities.gov.uk/buildingregs

- Environmental and security works, which are not included in the decent home standard but which contribute to creating and sustaining the quality of local environments, may be considered high priority in some areas; and
- Landlords may also wish to consider which relevant Lifetime Home Standards³ are appropriate when carrying out work to properties, and whether the work to be undertaken can be modified to help meet the needs of people with disabilities.

What types of property are covered by the standard?

- 4.8 The standard applies to all social housing *except leasehold and shared ownership properties. Social housing* includes sheltered housing and non-self contained or supported housing. The Standard does not apply to Care Homes providing nursing care and regulated by the Commission for Social Care. Social housing in the RSL sector is defined in the guidance notes to the Regulatory and Statistical Return (RSR).
- 4.9 Although leasehold and shared ownership properties are excluded from the social sector side of the target, they can be included as part of the private sector if the properties are occupied by vulnerable people. Landlords may also choose to include certain properties in the work programme due to special circumstances.

Property managed or owned by community-based and tenant-led groups

- 4.10 The Government wishes to encourage local authority tenants to explore future options for the ownership and management of their homes.
- 4.11 As the standard applies to all social housing, it will apply to property managed by another social landlord such as a tenant-led RSL, a Community Gateway Association (CGA) or a Community Land Trust. A CGA is a type of not-for-profit organisation that can be used to manage the stock or take ownership of it as an RSL. A Community Land Trust (CLT) is a model for the mutual ownership of land. The local authority could pass land or housing to a CLT that could in turn use the asset to generate income and would need to enter into an arrangement with a RSL. ALMOs and PFI schemes do not involve a change of landlord.

³ Lifetime Home Standards, produced by the Joseph Rowntree Foundation, available at: www.jrf.org.uk/housingandcare/lifetimehomes

A decent home - Detailed definition

- 5.1 This section gives detailed definitions of each of the four criteria that make up the Decent Home standard. Social landlords and local housing authorities may deliver housing above this standard but to ensure at least a minimum standard across all housing a common classification is needed to set and monitor the national target.
- 5.2 The HHSRS replaces the fitness standard as the statutory element of the Decent Home Standard. It must be incorporated in housing stock condition surveys. Information on the components of the HHSRS and how they can be measured have been in the public domain since August 2000.
- 5.3 If social landlords follow the guidance set out in the Department's *Collecting, Managing and Using Housing Stock Information*, they should have the information required to help identify dwellings in their stock which are likely to contain category 1 hazards. Further guidance on local measurement against each criterion, primarily through a stock condition survey, is available in *Decent Homes: Capturing the Standard at the Local Level.*⁴

Criterion a: It meets the current statutory minimum standard for housing

- 5.4 With the implementation of Part 1 of the Housing Act 2004 on 6 April 2006, HHSRS replaces the Housing Fitness Standard as the first criterion of the Decent Homes standard. HHSRS is a risk assessment procedure and does not set a standard.
- 5.5 To be decent, a dwelling should be free of category 1 hazards, and the existence of such hazards should be a trigger for remedial action unless practical steps cannot be taken without disproportionate expense or disruption. Landlords should consider the circumstances very carefully in the interests of the occupiers of the dwelling before concluding that a hazard cannot be dealt with effectively, and in such cases should ensure that the occupiers are fully aware of the position.

Criterion b: It is in a reasonable state of repair

- 5.6 A dwelling satisfies this criterion unless:
 - one or more key building components are old and, because of their condition need replacing or major repair; or

⁴ Decent Homes: Capturing the standard at a local level, DTLR (ODPM) (March 2002) published as an annex to Collecting, Managing and Using Housing Stock information is available on the DCLG web site: www.communities.gov.uk/decenthomes

- two or more other building components are old and, because of their condition need replacing or major repair.
- 5.7 A building component can only fail to satisfy this criterion by being old and requiring replacing or repair. **A component cannot fail this criterion based on age alone.**

Building components

- 5.8 Building components are the structural parts of a dwelling (e.g. wall structure, roof structure), other external elements (e.g. roof covering, chimneys) and internal services and amenities (e.g. kitchens, heating systems). A full list of building components is given in Annex A of this guidance. Key building components are those which, if in poor condition, could have an immediate impact on the integrity of the building and cause further deterioration in other components. They are the external components plus internal components that have potential safety implications and include:
 - external walls;
 - roof structure and covering;
 - windows/doors;
 - chimneys;
 - central heating boilers;
 - gas fires;
 - · storage heaters;
 - · plumbing; and
 - electrics.
- 5.9 Lifts are not considered to be a key component unless the lift or the lift shafts have a direct effect upon the integrity of the building.
- 5.10 If any of these components are old and need replacing, or require immediate major repair, then the dwelling is not in a reasonable state of repair and remedial action is required.
- 5.11 Other building components are those that have a less immediate impact on the integrity of the dwelling. Their combined effect is therefore considered, with a dwelling not in a reasonable state of repair if two or more are old and need replacing or require immediate major repair.

Old and in poor condition

5.12 A component is defined as 'old' if it is older than its standard lifetime. Components are in poor condition if they need major work, either full replacement or major repair. The definitions used for different components are at Annex A.

- 5.13 One or more key components, or two or more other components, must be both old and in poor condition to render the dwelling non-decent on grounds of disrepair. Components that are old but in good condition or in poor condition but not old would not, in themselves, cause the dwelling to fail the standard.
- 5.14 A building component which requires replacing before it reaches its expected lifetime has failed early. Under the terms of the definition, this early failure does not render the dwelling non-decent but should be dealt with by the landlord, typically on a responsive basis.
- 5.15 The disrepair criterion is set in such a way that it helps plan future investment needs. Landlords are more likely to be able to predict component failure after the component has reached a certain age than predicting early failures.
- 5.16 Where the disrepair is of a component affecting a block of flats the flats that are classed as non-decent are those directly affected by the disrepair.

Criterion c: It has reasonably modern facilities and services

- 5.17 A dwelling is considered not to meet this criterion if it lacks three or more of the following facilities:
 - a kitchen which is 20 years old or less;
 - a kitchen with adequate space and layout;
 - a bathroom which is 30 years old or less;
 - an appropriately located bathroom and WC;
 - · adequate external noise insulation; and
 - adequate size and layout of common entrance areas for blocks of flats.
- 5.18 The ages used to define the 'modern' kitchen and bathroom are less than those for the disrepair criterion. This is to take account of the modernity of kitchens and bathrooms, as well as their functionality and condition. This principle was agreed with local authority representatives during the consultation on the formulation of the MRA allocations. This allows for dwellings to be improved to a more modern standard than would simply be achieved by applying the disrepair criterion.
- 5.19 These standards are used to calculate the national standard and have been measured in the English House Condition Survey (EHCS) for many years. For example, in the EHCS:
 - A kitchen failing on adequate space and layout would be one that was too small to contain all the required items (sink, cupboards cooker space, worktops etc) appropriate to the size of the dwelling;

- An inappropriately located bathroom and WC is one where the main bathroom or WC is located in a bedroom or accessed through a bedroom (unless the bedroom is not used or the dwelling is for a single person). A dwelling would also fail if the main WC is external or located on a different floor to the nearest wash hand basin, or if a WC without a wash hand basin opens on to a kitchen in an inappropriate area, for example next to the food preparation area;
- Inadequate insulation from external airborne noise would be where there are
 problems with, for example, traffic (rail, road and aeroplanes) or factory noise.
 Landlords should ensure reasonable insulation from these problems through
 installation of appropriate acoustic glazing in line with the current Building
 Regulations; and
- Inadequate size and layout of common entrance areas for blocks of flats would be one with insufficient room to manoeuvre easily for example where there are narrow access ways with awkward corners and turnings, steep staircases, inadequate landings, absence of handrails, low headroom etc.
- 5.20 Landlords may work to different detailed standards than those set out above. In some instances there may be factors which may make the improvements required to meet the Decent Homes standards' challenging, or impossible, factors such as physical or planning restrictions. Where such limiting factors occur the property should be assessed to determine the most satisfactory course of action in consultation with the relevant body or agency so as to determine the best solution. The outcome may determine that some improvements may be possible even if all are not. A dwelling would not fail this criterion, where it is impossible to make the required improvements to components for physical or planning reasons.
- 5.21 Local authorities must consider how Decent Homes feeds into wider regeneration strategies such as Market Renewal Pathfinder schemes; it may not be necessary to make homes decent when demolition and new build may be more appropriate. At national level, planning policy guidance makes clear that when undertaking such schemes, a range of factors must be considered including Decent Homes. National planning policy guidance for housing are set out in:
 - Planning Policy Guidance (PPG) Note 3: Housing [published in 2000]; and
 - Draft Planning Policy Statement (PPS) 3: Housing [published in December 2005 and public consultation closed on 27 February 2006. Once finalised, it will replace PPG3]
- 5.22 Good practice indicates that a clear logical process, which involves all the parties, is the best way of taking a development forward. Important factors in this are early involvement of other departments within the local authority e.g. planners, legal etc; adherence to planning procedures; partnership working with tenants and other stakeholders; and ensuring awareness of other issues that may impact on delivery e.g. conservation areas.

Criterion d: It provides a reasonable degree of thermal comfort

- 5.23 The revised definition requires a dwelling to have both efficient heating; and effective insulation. Efficient heating is defined as any gas or oil programmable central heating; or
 - · electric storage heaters; or
 - warm air systems; or
 - underfloor systems; or
 - programmable LPG/solid fuel central heating; or
 - similarly efficient heating systems which are developed in the future.
- 5.24 The primary heating system must have a distribution system sufficient to provide heat to two or more rooms of the home. There may be storage heaters in two or more rooms, or other heaters that use the same fuel in two or more rooms. Even if the central heating system covers most of the house making a dwelling decent, under the HHSRS a landlord must be sure that the home is warm enough for the occupant.
- 5.25 Heating sources which provide less energy efficient options fail the Decent Homes standard. Programmable heating is where the timing and the temperature of the heating can be controlled by the occupants. However this is not a requirement in supported housing or housing for older persons where it is necessary for health and safety reasons for landlords to ensure adequate levels of heating are maintained.
- 5.26 Because of the differences in efficiency between gas/oil heating systems and the other heating systems listed, the level of insulation that is appropriate also differs:
 - For dwellings with gas/oil programmable heating, cavity wall insulation (if there are cavity walls that can be insulated effectively) or at least 50mm loft insulation (if there is loft space) is an effective package of insulation; and
 - For dwellings heated by electric storage heaters/LPG/programmable solid fuel central heating a higher specification of insulation is required: at least 200mm of loft insulation (if there is a loft) and cavity wall insulation (if there are cavity walls that can be insulated effectively).
- 5.27 A SAP rating of less than 35 (using the 2001 SAP methodology) has been established as a proxy for the likely presence of a Category 1 hazard from excess cold. From April 2007, local authorities will report energy efficiency using the new 2005 methodology⁵.
- 5.28 Loft insulation thickness of 50mm is a minimum designed to trigger action on the worst housing. Where insulation is being fitted, landlords should take the opportunity to improve the energy efficiency and install insulation to a much greater depth.

⁵ www.bre.co.uk/sap2005

- 5.29 The Government is considering the most effective means of improving the energy efficiency of 'hard to treat' homes where the construction may preclude the installation of traditional cost-effective insulation measures. This is being considered in the wider context of progress against the UK Fuel Poverty Strategy. More information on dealing with hard to treat properties and best practice guidance is available from the Energy Savings Trust website⁶.
- 5.30 Where new heating systems are being installed or existing system replaced, landlords should take the opportunity to increase the energy efficiency of the dwelling if possible. This would be achieved through installing energy efficient boilers where possible. Energy efficient boilers are those with a SEDBUK A-C rating. Where this is not possible, cavity walls should be insulated where feasible.
- 5.31 If new heating or insulation is being installed, it is important that steps are taken to ensure the dwelling is adequately ventilated.
- 5.32 Specific programmes are now in place which provide additional resources to carry out energy efficiency programmes.⁷ These are:
 - The Energy Efficiency Commitment (EEC): This requires electricity and gas suppliers to meet targets for the promotion of improvements in domestic energy efficiency. They do this by encouraging and assisting domestic consumers (in both private and public sectors) to take up energy efficiency measures. Further information can be found on the DEFRA web site⁸.
 - Warm Front: This scheme tackles fuel poverty among vulnerable households in the private rented and owner occupied sectors. The scheme provides grants for packages of insulation and heating improvements, including central heating systems, for eligible households. Further information can be found on the DEFRA web site⁹.
 - Transco's Affordable Warmth Programme: This programme has introduced Affordable
 Warmth leases targeted at RSLs and LAs. These leases make the installation of highefficiency gas central heating and energy efficiency measures more financially
 attractive for both landlords and tenants.

⁶ http://www.est.org.uk/housingbuildings/

⁷ More information is available via the DEFRA web site: www.defra.gov.uk/environment/energy/index.htm

⁸ www.defra.gov.uk/environment/energy/eec/index.htm

⁹ www.defra.gov.uk/environment/energy/hees/index.htm

Implementing the Decent Homes standard – Social sector

6.1 This section explains how the Decent Homes standard should be implemented in the context of planning investment in the housing stock. Investment needs to be considered in the context of the future demand for the housing stock. In some areas of low demand, it may not be appropriate to invest in dwellings because there is unlikely to be sufficient demand for these in the longer term. Landlords should consider whether clearance of the dwellings and regeneration is the most effective long-term strategy.

Standard of work to be carried out

- 6.2 The Decent Homes standard is a minimum standard that triggers action below which no social housing should fall below by 2010 or other renegotiated deadline, but it does not represent the standard to which all work should be carried out. The work that is done to bring homes above this level will vary with the policies of social landlords.
- 6.3 As the standard is a minimum standard that will need to be maintained, landlords will want to take this into account when planning for the future of their stock. In the case of flats and maisonettes it is sensible to ensure the standard is maintained by carrying out works to a sustainable level rather than a minimum standard. This will apply particularly where the nature of construction creates particularly high costs in carrying out works or where the materials used in construction present particular problems.
- 6.4 When considering refurbishment packages, landlords should consult with current Building Regulations and other relevant technical publications. 10 And the current Building Regulations should be used as a guide as far as possible where they exceed the Decent Homes standard.
- 6.5 Landlords may also want to consider other factors when carrying out work to make homes decent. For example ensuring that works undertaken do not make the home more difficult to use for a person with disabilities, considering lifetime homes and carrying out works in an environmentally sustainable way. On the last of these, Sustainable Homes, in conjunction with the Housing Corporation, has developed Green Street¹¹, a web-based tool for sustainable refurbishment. Green Street is based around a virtual street containing houses, flats and bungalows from pre-1900s to 1970s. For each house type solutions for sustainable refurbishment are available, covering issues such as insulation, boiler replacement, water efficient appliances and material use.

¹⁰ www.communities.gov.uk/buildingregs

¹¹ www.greenstreet.org.uk

Work outside the Decent Homes standard

- 6.6 Delivery of decent homes is a key priority, but this should not be an obstacle to landlords carrying out other work that falls outside the Decent Homes standard but achieves other local priorities such as improving the quality of the local area through environmental work to the estates, physical improvements to help design out crime or provision of disabled persons' adaptations.
- 6.7 The quality of people's homes is influenced by the spaces around them. It is recognised that well-designed, well-managed green spaces by and in between housing are important in making neighbourhoods liveable and contribute to people's quality of life. *The Neighbourhoods Green*¹² project aims to highlight this and is a three-year partnership project which will provide guidance, support and tools for housing associations, local authority housing departments, ALMOs, tenants associations and their partners.
- 6.8 When carrying out work to remove hazards, landlords should always consider remedial action to ensure that the hazard does not recur within at least 5 years.

Working in accordance with tenants' wishes

- 6.9 The Decent Homes standard ensures that all social tenants have access to a minimum standard of housing. However tenants may have other priorities and these need to be taken into account.
- 6.10 Landlords have reported that some tenants do not want their kitchens and or bathrooms modernised. This work need not be done as the standard is sufficiently flexible for homes to be without two of the components in the modernisation list and still be classed as decent.
- 6.11 Where an individual tenant does not want work carried out on their home to bring it up to the Decent Homes standard, then the home can remain below the standard until the property is vacated, at which point the necessary work can be undertaken. Exceptions to this are where works are required to maintain the structural integrity of the dwelling or to prevent other components within the dwelling from deteriorating, or where a category 1 hazard must receive early attention.
- 6.12 Delivery of the Decent Homes standard will be important in bringing health benefits to tenants and reducing health inequalities. Authorities will be expected to set out in their business plans the investment strategy they consider the most effective, how they are taking tenants' wishes into account and how their effort is to be targeted. Although the Guidance does not require landlords to focus investment on the most deprived neighbourhoods or on vulnerable tenants, it may be necessary, or make strategic sense, to do so in some circumstances, for example by prioritising measures such as heating and insulation for elderly or other vulnerable tenants.

¹² www.neighbourhoodsgreen.org.uk

Timing of work

- 6.13 Effective planning of renovation programmes is vital for the delivery of the decent homes for all social sector tenants by 2010 or other renegotiated deadline. Landlords need to identify and evaluate the options for improving the condition of their housing over the period. Programmes of work should be planned to enable an effective use of resources in tackling non-decent housing and preventing decent housing from deteriorating into non-decency, as well as taking into account the views of tenants and future demand for the homes. Timing of the work will need to take account of the following:
 - Premature failure of building components. Where there are signs of early failure, this will need to be accommodated in the investment strategy.
 - Components lasting longer than expected. Under the disrepair criterion components should not be replaced just because they have reached the end of their predicted life. They should show signs of failure before a replacement programme is put in place.
- 6.14 Landlords should determine the most effective balance between making homes decent and preventing homes falling below the standard.

Packages of work

- 6.15 If a dwelling fails to meet one criterion, landlords should consider whether it is appropriate to only carry out the work to make the homes decent or whether it is more effective to carry out additional works at the same time. Examples are given below:
 - Dwellings are non-decent because they have windows that need replacing. Their
 replacement would make the dwelling decent, but it may be more cost effective to
 replace both windows and doors, the latter being likely to require replacement in
 the next few years.
 - Providing additional loft insulation at the same time as carrying out re-roofing work in circumstances where provision of further insulation is not required to meet the Decent Homes standard.
 - When undertaking any work to improve the thermal efficiency of a dwelling, consideration should be given to improving overall energy efficiency aspects, such by installing additional insulation and ventilation, even if the dwelling already meets the minimum insulation requirements.

Implementing the Decent Homes standard - Private sector

- 6.16 In 2002 the Decent Homes standard was extended to include the private sector with the focus on reducing the proportion of vulnerable households living in non-decent homes. This section of the guidance should be read in conjunction with ODPM circular 05/2003¹³. This circular sets out how a local authority should develop a private sector renewal strategy as part of its overall housing strategy and how it should publish a policy setting out its use of powers under the Regulatory Reform Order 2002 (the RRO) to support private sector renewal. Meeting the private sector element of the Decent Homes standard should be an important element of this process. Set out below is further guidance on how this integration should be achieved.
- 6.17 The approach to making private sector homes decent will be different from that adopted for homes in the social sector, reflecting the different ownership responsibilities and the powers and duties of local authorities to take enforcement action under Part 1 of the Housing Act 2004 on the basis of HHSRS assessments. Achieving the Decent Homes standard will only be achieved by adopting a combination of policies which will involve a range of assistance, advice and encouragement to homeowners and using enforcement powers only as a last resort. It will also involve developing a close relationship with other partnerships and policies and this is covered in detail in circular 05/2003.
- 6.18 In particular Home Improvement Agencies (HIAs) are seen by the Government as having a particularly important role to play in taking forward the Decent Homes agenda. HIAs provide a valuable service to help elderly, disabled and vulnerable people to remain living independently in their own home for as long as they wish. There are currently around 200 HIAs covering over 300 local authority areas. They assess the clients' needs for improvements and adaptations, arrange the best funding option and provide support during the stress and disruption that work in the home can cause. This enables the client to remain in a safe, warm and secure environment. Funding for HIAs has, since 1 April 2003, been part of the Supporting People programme. DCLG is investing another £2m in HIAs from 1 April 2004 to encourage restructuring of the existing sector and expanding into areas where there is currently little or no coverage. Foundations operate as the National Co-ordinating Body for Home Improvement Agencies under contract to DCLG to promote and develop the HIA sector. They can be contacted on **01457 891909** and can advise on all aspects of HIAs work and whether an agency operates in a particular area.
- 6.19 The Warm Front grant programme, administered by the Department for Environment, Food and Rural Affairs, makes an important contribution to meeting the thermal comfort criterion of the Decent Homes standard. Local authorities need to work closely with the scheme managers to maximise take up of resources by homeowners and tenants, share information about vulnerable occupiers and, where necessary, supplement the programme to ensure that the decency standard is achieved.

¹³ Housing Renewal: ODPM Circular 05/2003 www.communities.gov.uk/pub/789/HousingrenewalODPMcircular052003pdf192kb_id1152789.pdf

- a. Private sector renewal policies to support delivery of the target
- 6.20 The powers given to local authorities under the RRO are designed to provide maximum flexibility to develop new policies for private sector renewal which are consistent with local priorities and reflect the availability of resources. Therefore, while local authorities should aim to achieve or in some respects exceed the Decent Homes standard in every applicable case where they provide advice or assistance, they will want to offer a tailored package of financial incentives depending on the precise circumstances of each case. Some authorities will only wish to offer grants to those owners who are seen either as most vulnerable or in cases where no significant equity is available in the property. In other cases, loans, equity release or other forms of assistance and advice may be more appropriate. In area regeneration schemes the form of assistance will be determined in the context of the wider regeneration objectives. For example, group repair schemes often only provide grants to deal with structural and other external problems. It is unlikely that many authorities would want to provide grant assistance for the modernisation of internal facilities.
- 6.21 Financial assistance may in certain circumstances be made available to landlords in the private rented sector in line with the authorities overall policy for that sector reflecting local priorities. But local authorities should bear in mind the importance of the decency standard and in all cases provide advice and support to owners to encourage them to achieve it.

b. Enforcement powers

- 6.22 Local authorities have statutory duties and powers to take enforcement action to deal with properties containing hazards assessed under HHSRS. Under the Housing Act 2004, local authorities have a duty to take appropriate enforcement action in relation to category 1 hazards and discretion to act in relation to category 2 hazards. Enforcement is an important part of the strategy in dealing with non-decent homes, particularly those in the private rented sector. In using their enforcement powers, local authorities should have regard to the PSA target and its focus on vulnerable households
- 6.23 It should be noted that, as well as being subject to the requirements of the Decent Home standard, RSLs can be subject to local authorities' enforcement powers. Authorities are advised to take account of RSLs' decent homes implementation programmes when considering the use of their powers. RSLs for their part are reminded that the homes of vulnerable tenants in particular may need attention beyond that required by the Decent Homes standard, and that they should establish the likely approach of their local authorities to such cases.

c. Limitations in securing the target

6.24 Landlords are not expected to attempt remedial works to remove category 1 hazards if this is impracticable – replacement of stairs for example. It is relevant to note that, in the enforcement context, the Housing Act 2004 gives local authorities discretion in the appropriate use of their powers and they may decide that immediate enforcement action is unnecessary or impracticable. They may decide to suspend action, or issue a hazard awareness notice (which requires no action) where the occupants are at minimal risk from the hazard in question or the hazard is an integral feature of a building which cannot be dealt with. It should also be remembered that, although local authorities have powers of entry in relation to HHSRS, they have no power to enter premises against the wishes of the owner to make a home decent in other respects.

6.25 Relying on enforcement action alone is unlikely to ensure that the private sector stock meets the Decent Homes standard. Local authorities will need to work with partner agencies to make all applicable private sector homes meet the standard wherever possible. If an owner elects not to modernise their home and to decline assistance or advice from the local authority there is little more that can be done until there is a change of owner (unless the conditions are so poor that the authority feels that it must intervene under Part 1 of the Housing Act 2004 in the interests of the occupiers).

Definition of vulnerable

- 6.26 Vulnerable households have been defined for the purposes of the Decent Homes standard as a whole as those in receipt of at least one of the principal means tested or disability related benefits. For the purpose of establishing the national 2001 baseline from the English House Condition Survey the benefits taken into account were:
 - income support;
 - housing benefit;
 - council tax benefit;
 - disabled persons tax credit;
 - income based job seekers allowance;
 - working families tax credit;
 - attendance allowance;
 - disability living allowance;
 - industrial injuries disablement benefit;
 - war disablement pension;
 - child tax credit;
 - working tax credit;
 - pension credit.
- 6.27 The detailed definition of qualifying benefits used to define vulnerable will be subject to change. The last three qualifying benefits have been introduced since 2001 and they have different qualifying thresholds.
- 6.28 This is the definition of vulnerable which all local authorities should use to establish a baseline and monitor progress towards the Decent Homes standard. It should be noted that this definition is used for national monitoring purposes. Local authorities have flexibility in providing discretionary assistance for repairs under the Regulatory Reform Order (RRO) (Housing Assistance) Order 2002. It is for the local authority to decide the circumstances in which to give assistance and the form that assistance may take.

Measuring the baseline position and monitoring progress – Social sector

National monitoring

- 7.1 The national baseline was set at 1 April 2001 using data from the 2001 English House Condition Survey (EHCS). There were 1.6 million non-decent homes in the social sector at that time. The national baseline figures quoted are for the number of dwellings currently failing on that date, and do not take account of projecting forward deterioration or the impact of HHSRS on the original baseline. The number of unfit properties was 1 million in 2003, whereas those containing category 1 hazards is closer to 4 million (2004). More detailed information about the impact of HHSRS on decent home targets will be available from the 2006 EHCS towards the end of 2007. The current data suggests that in the social sector there might be around 680,000 homes containing category 1 hazards. Many of these will be eliminated under current work programmes. But it is possible that around 100,000 homes will still contain cold hazards, which minimum work to improve thermal comfort cannot deal with.¹⁴
- 7.2 Progress up to 2010 will be monitored nationally through the same survey, which, from 2002, has been put on a continuous basis.

Social landlords' assessment of the local baseline position

- 7.3 The Department has not cascaded specific targets for individual social landlords other than that all social housing should be decent by 2010. The same will apply where deadlines beyond are renegotiated. However, all social landlords should be setting targets for tackling their non-decent housing and monitoring their progress. This has been a Best Value Performance Indicator¹⁵ from 2002/03.
- 7.4 Government Offices are working with local authorities and the Housing Corporation is working with RSLs to establish their plans and mechanisms for monitoring progress towards making their stock decent. Local authorities will be required to set targets and report on their progress as part of their Statistical Appendices to their HRA Business Plan. The Housing Corporation will monitor progress made by RSLs, which will be reported through the Regulatory and Statistical Return.

¹⁴ Estimates of cold hazards assume that SAP 35 is a simple proxy for a category 1 hazard

¹⁵ Best Value Performance Indicators 2002/03 product code 99LG0110, available from the DCLG Publications Centre, see the imprint page of this document. Our indicator can also be found at http://www.communities.gov.uk/index.asp?id=1136106

7.5 Local monitoring requires the establishment of local baselines and setting realistic plans for delivery against targets, as well as establishing suitable mechanisms for on-going monitoring and reporting progress. Many landlords have already done this but may wish to refine initial estimates. Each criterion should be measurable through the data captured through a standard stock condition survey. In both the local authority and RSL sectors it is essential that all landlords are working to the same definition of a decent home so that they meet the 2010 or other renegotiated deadline.

Predicting future progress

- 7.6 The following paragraphs explain how to predict the future changes in levels of non-decent housing. *Decent Homes: Capturing the standard at the local level* ¹⁶ provides further details on how to collect the necessary information.
- 7.7 To address the problem of non-decent housing locally, social landlords need to understand the effect of different investment strategies on the level of non-decent homes. This requires an understanding of flows of stock into and out from non-decency and is part of investment appraisal. Key factors are:
 - Whether dwellings that are currently decent will deteriorate sufficiently to become non-decent in the planning period if no investment is made; and
 - Whether the type and extent of investment planned will make non-decent dwellings decent and prevent decent dwellings from becoming non-decent in the planning period.
- 7.8 The change in the number of non-decent homes from one year to the next is the net effect of these two flows. The year on year position would be simple to measure if a stock condition survey was repeated each year but this would not help in predicting how different investment plans would change the number of non-decent homes over the short and medium term. Nor is an annual stock condition survey necessary to estimate year on year change, provided there is good information about the dwellings on which investment is taking place together with a good property data base that includes data about the age of building components and their life expectancy.
- 7.9 Where non-decent properties are to be demolished, these can be counted as reducing the number of non-decent homes when reporting progress. The sale of properties through the Right to Buy or sold for any other reason also contributes to the reduction of non-decent homes in the social sector.
- 7.10 As decent homes moves toward a mixed communities' agenda, those local authorities and RSLs undertaking major transformational works may be eligible to renegotiate deadlines beyond 2010. In such cases, the timeframe for earmarking demolitions would be aligned to the new deadline. Similarly, this would apply to ALMOs going beyond 2010, and in those situations where there are value for money in procurement issues, or a late start.

¹⁶ Decent Homes: Capturing the standard at the local level, DTLR (ODPM) (March 2002) published as an Annex to Collecting, Managing and Using Housing Stock information. is available on the DCLG web site: www.communities.gov.uk/decenthomes

7.11 In these cases, it will need to be negotiated on a case by case basis as to what work should be done to these properties in the intervening period. Where demolition is scheduled in the relative short term, it is likely that only routine maintenance work will be required. However, where demolition is not scheduled for some years, some minimal investment may be required depending on the condition of the properties. This will be dealt with on a case by case basis.

Estimating deterioration

- 7.12 It is usually possible to predict which dwellings are likely to deteriorate and become non-decent. To do this, it may be helpful to classify dwellings into one of three categories:
 - Non-decent a dwelling that fails now on one or more of the criteria;
 - **Potentially non-decent** a dwelling that currently meets the standard but is likely to deteriorate and become non-decent if no work is done in the short term; and
 - **Decent** a dwelling which does not require capital investment even in the short term to prevent it becoming non-decent.
- 7.13 One task in devising an investment programme is to determine what will happen to dwellings which are initially decent in the absence of any investment during the period in question. The following are factors that will influence whether or not there is deterioration:
 - **age** dwellings will fall below the defined standard over time (e.g. in modernity of facilities) simply because components are now a number of years older;
 - lack of preventative work many building elements will deteriorate in condition; they will show signs of increasing disrepair, and dampness or structural instability may appear; and
 - design e.g. layout of the kitchen, presence of insulation and heating system. These
 should not change over the period; no additional information is required to describe
 these features.

Predicting impact of investment

- 7.14 The impact of different investment strategies on the future condition of the stock also needs to be estimated. The following considerations will need to be made:
 - It may help to classify dwellings receiving investment as non-decent, potentially non-decent or decent before that investment is made.
 - Where work is carried out, does it result in changes to the age of major building components and/or increases their remaining life? e.g. Replacing a building component sets its age to zero and maximises its remaining life.

- Where a dwelling is non-decent because it has some inherent design defect has it been remedied? In the case of thermal comfort, has the efficiency of the heating system been increased or insulation been improved?
- 7.15 External factors that will affect the level of non-decent housing need to be considered, e.g. the level of stock losses and gains, such as demolition, RTB sales, the return of stock from New Deal for Communities (NDC) management, transfers and acquisitions.
- 7.16 It will be necessary to carry out a stock condition survey periodically to re-quantify the number of non-decent homes.

Impact on landlords of the introduction of the Housing Health and Safety Rating System (HHSRS)

- 7.17 To be decent, a dwelling should be free of category 1 hazards. The components of the HHSRS and how they can be measured in a stock survey have been in the public domain for 5 years and stock survey completed since then could have covered freedom from category 1 hazards. Any future survey must incorporate the HHSRS. However, landlords who do not have any information on the extent to which their stock complies with HHSRS do not have to carry out an unplanned stock survey but should ensure that they collect this information as part of their next planned survey.
- 7.18 Before embarking on any programme of work, landlords should assess whether the dwellings in the programme have any category 1 hazards that would not be remedied by the planned work. If such hazards are identified, appropriate remediation should be carried out as part of the proposed work programme.
- 7.19 It is difficult to say how social landlords might be affected by HHSRS, but given the work already anticipated in relation to Decent Homes, most landlords should not find a significant increase in non-decency. The most common hazard is excess cold and many of these hazards should be tackled in meeting the thermal comfort criterion or through existing programmes to tackle fuel poverty and energy efficiency. However, landlords will need to consider if there are dwellings which will still have a low level of energy efficiency and may need further work to meet the Decent Homes standard. There may be some landlords who have other problems in their stock. These problems should already be known to them for example the extent to which radon affects housing in affected areas, or the presence of asbestos. Landlords should ensure that future surveys help them assess the extent of hazards typical in their stock.
- 7.20 Landlords are not expected to remove a category 1 hazard where there are serious practical difficulties. For example, the risk of falls in relation to stairs may be difficult to eliminate completely in certain properties. In such cases, landlords should do what they can to lower the risk, and ensure that the occupier is aware that some risk remains. Where a category 1 hazard remains after refurbishment, the landlord should consider whether the occupier is in an age group identified as particularly vulnerable to that hazard. If so, the landlord may need to consider whether the accommodation is more suitable for a tenant not in the vulnerable age group.

Future stock surveys - identifying new non-decent homes

- 7.21 Landlords who have already carried out a stock survey excluding HHSRS and who have already carried out work to their stock without taking account of hazards, will need to build HHSRS into their next stock survey.
- 7.22 When a new survey has been completed landlords may find that a proportion of their stock has become non-decent. Future refurbishment will need to deal with these hazards. We would not expect this to present major difficulties but if specific issues arise landlords should seek advice from DCLG on how to report on non-decency if new surveys highlight the likelihood of significant hazards in the stock.

Measuring the baseline position and monitoring progress – private sector

- 7.23 The key points outlined above also have some application to the private sector. In particular, stock that has been made or is in the process of being made decent may be found to contain some non-decent dwellings following a survey incorporating HHSRS.
- 7.24 The estimate of the national baseline that nearly 1.056 million vulnerable households in the private sector were living in non-decent homes is based on data from the 2001 English House Condition Survey. As explained in *The Decent Homes Target Implementation Plan* this will be monitored annually at a national level.
- 7.25 The Decent Home Target Implementation Plan also sets out a trajectory for delivery that includes targets for specific years up to 2020 expressed as the proportion of vulnerable households in the private sector living in decent homes. The relevant target percentages are 65% by 2006, 70% by 2010 and 75% by 2020. There is also a target that this proportion will increase year by year.
- 7.26 Precise targets have not been set at either a regional or local authority level. Regional housing strategies, which are being developed by the Regional Housing Boards, will include a policy to address this issue which is consistent with the overall national PSA7 target. The EHCS will be able to produce reasonably reliable estimates of vulnerable households in non-decent homes annually at the regional level from 2006 using a combination of accumulated survey results and modelling.
- 7.27 At local authority level, Circular 05/2003 emphasises the need for private sector housing renewal strategies to be evidence based and that identifying local issues, needs and expectations within localities is a vital step in establishing robust policies.
- 7.28 In reviewing their strategies, local authorities are expected to identify the level of non-decent homes occupied by vulnerable households in their authority and within the level of resources available to produce a robust and consistent policy response to the problem. This response needs to be sufficient to ensure that, at the national level, targets for private sector decent homes are being achieved. Consistency with the national target is difficult to define precisely in central guidance and is a matter for discussion with Government Offices in relation to policy priorities set out in the Regional Housing Strategies and the individual local authority Housing Strategies. The policy should, however, be robust enough to secure, at local authority level, a year on year increase in the proportion of vulnerable households living in decent homes and as a minimum to reach the same target figure of 70 per cent by 2010 as set nationally.

- 7.29 In establishing a baseline position local authorities will need to undertake a stock condition survey. DCLG guidance *Collecting, Managing and using Housing Stock Information: Good Practice guidance* ¹⁷ is relevant for this exercise.
- 7.30 However, local authorities will need to go beyond a basic stock condition survey. As paragraph 2.33 of circular 05/2003 points out, housing stock condition information in isolation will be insufficient as a basis for developing policy. An understanding of the local housing market and the financial circumstances of homeowners will be essential ingredients.
- 7.31 Local authorities will therefore need to establish a baseline position that will include the following key information:
 - the number of non-decent private sector dwellings in the owner-occupied and private rented sectors;
 - the reasons for these dwellings failing the decency standard in relation to the four criteria and the approximate cost of rectifying the problem;
 - the number of vulnerable households living in the private sector and the proportion of them living in non-decent homes; and
 - an analysis of the local housing market with an emphasis on the present and future levels of un-mortgaged equity in the target non-decent properties occupied by vulnerable households and the socio-economic circumstances of the occupiers.
 This analysis will help to determine the appropriate policy response in terms of the potential for loans and equity release policies in addition to grants.
- 7.32 As part of the strategy process local authorities will also need to be in a position to monitor and report on progress towards increasing the percentage of vulnerable households in decent homes in their area. It is recommended that this should be done by a systematic recording of policy outputs. This should include the number of non-decent homes occupied by vulnerable households which:
 - are made decent through assistance/enforcement;
 - received assistance/enforcement action but where the full decency standard not achieved; and
 - are not made decent because assistance was rejected by the owner.
- 7.33 Every effort should also be made by authorities to collect information from partners on the number of target homes which have been made decent by other programmes such as Warm Front or as part of a low demand pathfinder programme or other regeneration project.

¹⁷ Collecting, managing and using bousing stock information: A Good Practice Guide, ODPM (2000). www.communities.gov.uk/decenthomes

- 7.34 The output measures described above will only be able to demonstrate on an annual basis the rate at which the baseline problem is being tackled by the local authority. This analysis will not take into account the level of stock deterioration, private renewal activity or changes in the numbers of vulnerable households. A repeat of the stock condition survey together with the related survey of socio-economic data will therefore be necessary at periodic intervals as recommended in DCLG guidance on stock surveys.
- 7.35 We have produced a set of look up tables that will assist local authorities in estimating levels of vulnerable households living in non-decent homes in their area which will help prior to a local authority establishing that information for themselves. The Ready Reckoner is based on the association between vulnerable households living in non-decent homes in any given district and the level of deprivation and age of the private sector dwelling stock in that area. It models local measures of the problem from district-level input of:
 - the 'deprivation group' to which each district has been assigned; and
 - the age profile of the private sector stock for the district.
- 7.36 The Ready Reckoner for PSA7 private sector vulnerable households in non-decent homes is available on the DCLG web site¹⁸.

¹⁸ www.communities.gov.uk/decenthomes

ANNEX A

Component lifetimes and definition of 'in poor condition' used in the national measurement of the disrepair criterion

1. Table 1 shows the component lifetimes within the disrepair criterion to assess whether the building components are 'old'. These are used to construct the national estimates of the number of dwellings that are decent and those that fail. These lifetimes are those considered appropriate for use in planning for newly arising renewal works for social landlords. They are the same as those used to calculate the MRA which were agreed following consultation in November 1999. Landlords will wish to consider whether these lifetimes are appropriate within their own stock for predicting the age at which the component ceases to function effectively.

Table 1: Component lifetimes used in the disrepair criterion			
Building components (key components marked*)	Houses and bungalows	All flats in blocks of below 6 storeys	All flats in blocks of 6 or more storeys
Wall structure*	80	80	80
Lintels*	60	60	60
Brickwork (spalling)*	30	30	30
Wall finish*	60	60	30
Roof structure*	50	30	30
Roof finish*	50	30	30
Chimney*	50	50	N/A
Windows*	40	30	30
External doors*	40	30	30
Kitchen ¹⁹	30	30	30
Bathrooms	40	40	40
Heating central heating gas boiler*	15	15	15
Heating central heating distribution system	40	40	40
Heating other*	30	30	30
Electrical systems*	30	30	30

¹⁹ Kitchens are assumed to require replacing on grounds of repair every 30 years, bathrooms every 40 years. Therefore the age aspects in the disrepair criterion are set at 30 and 40 years respectively. These lifetimes were agreed following consultation on the MRA. However, it is clear that social landlords and tenants prefer these amenities to be replaced more frequently, to enable them to be maintained at a reasonably modern standard. Thus different ages are required for kitchens and bathrooms under the reasonably modern facilities and services criterion.

In poor condition

- 2. Table 2 sets out the definitions used within the disrepair criterion to identify whether building components are 'in poor condition'. These are consistent with EHCS definitions and will be the standard used to monitor progress nationally through the EHCS. Social landlords should consider appropriate minimum standards to use for their own local assessment and measurement of progress. For example, some will decide it appropriate to replace the whole roof covering if more than one third needs to be replaced (compared with one half used for national estimates).
- 3. During a stock condition survey, the surveyors should assess the extent to which individual building components require immediate work. Their judgement should be used to assess whether the components should be classified as in poor condition at the time of inspection or not. The general line used in the EHCS is that, where a component requires some work, repair should be prescribed rather than replacement unless:
 - the component is sufficiently damaged that it is impossible to repair;
 - the component is unsuitable, and would be even it were repaired, either because the material has deteriorated or because the component was never suitable;
 - (for external components) even if the component were repaired now, it would still need to be replaced within 5 years.

Table 2: Definition of 'poor condition' used in disrepair criterion			
Definition of 'poor condition' used in EHCS			
Wall structure	/all structure Replace 10% or more or repair 30% or more		
Wall finish	Replace/repoint/renew 50% or more		
Chimneys	1 chimney need partial rebuilding or more		
Roof structure	Replace 10% or more or strengthen 30% or more		
Roof covering	Replace or isolated repairs to 50% or more		
Windows	Replace at least one window or repair/replace sash or member to least two (excluding easing sashes, reglazing painting)		
External doors	Replace at least one		
Kitchen	Major repair or replace 3 or more items out of the 6 (cold water drinking supply, hot water, sink, cooking provision, cupboards, worktop)		
Bathroom	Major repairs or replace 2 or more items (bath, wash hand basin, WC)		
Electrical system	Replace or major repair to system		
Central heating boiler	Replace or major repair		
Central heating distribution	Replace or major repair		
Storage heaters	Replace or major repair		

ANNEX B

Clarifying the Roles of Key Delivery Supporters

The following sets out the roles and responsibilities for some of the key Decent Homes stakeholders.

Government Offices

- Ensuring delivery of decent homes by local authorities in its region and ensuring that
 the chosen option delivers decent homes, empowers tenants and the community,
 improves the strategic role of the local authority and stimulates neighbourhood
 renewal and, where appropriate, sustainable mixed communities.
- Providing specialist input to support authorities and tenants through the chosen stock option ALMO, PFI, Transfer.
- Facilitating use by local authorities of appropriate support services, for example setting up mentoring opportunities between authorities.
- Ensuring tenants are effectively engaged in the process.
- Helping local authorities develop the right skills to enable them to deliver and facilitating and encouraging the development and dissemination of good practice and shared learning.

Audit Commission

- Assessing the capacity and capability of district councils that own their housing stock to meet the Decent Homes standard by 2010 or other renegotiated deadline under the Comprehensive Performance Assessment (CPA) framework.
- Building on the outcomes of single tier CPA to assess the risks of local authorities not meeting the Decent Homes standard.
- Inspecting ALMOs to ensure they deliver high quality housing services and also have the capacity to bring their housing stock up to the Decent Homes standard.
- Helping the DCLG to monitor the performance of ALMOs by assessing how they
 have implemented improvement plans and responded to recommendations in
 inspection reports.
- Providing advice to ALMOs and prospective ALMOs about the inspection process and providing written guidance to ALMOs on achieving excellence in housing management and the inspection of governance arrangements.

- Inspecting the repairs and maintenance services and asset management strategies of housing associations to assess their ability to meet the Government's Decent Homes standard by 2010 or other renegotiated deadline.
- Publishing research and good practice advice on the delivery of decent homes (and related issues) by local authorities and housing associations from inspection, audit and other evidence.

Housing Corporation

- Monitoring the progress of Housing Associations towards achieving the Decent Homes standard via the Regulatory and Statistical Return (RSR) and undertaking analysis of RSR data.
- Carrying out risk assessments of RSLs' Asset Management practice and performance as part of the risk based regulation process and maintaining a Risk Register of RSLs facing the biggest challenges in achieving the Decent Homes standard.
- Maintaining regulatory involvement with RSLs as necessary including review of asset management strategies to assess capacity to meet the Decent Homes standard.
- Commissioning and publishing research into RSLs' performance against the decent homes target and working with professional and representative bodies to ensure provision of good practice advice to RSLs.
- Responding to queries and providing advice and guidance to RSL on decent homes.
- Liaising with DCLG to advise of the impact of aspects of the Decent Homes standard on RSLs.
- Approving proposals for regeneration/remodelling where these incorporate amended targets for meeting the Decent Homes standard for some parts of RSLs' stock.

National Federation of ALMOs

- Acting as a trade body/lobbying organisation to represent and promote the interests of ALMOs to DCLG, local authorities and residents.
- Offering practical help to those interested in the ALMO option.

HOUSING HEALTH AND SAFETY SYSTEM [ENGLAND] REGULATIONS 2005

CRIB SHEET for Home visits

PRESCRIBED HAZARDS:

[1] Damp and Mold Growth

Check for: high moisture [70%+], mites, failed damp proof course/Damp proof membrane, failed door/ window seal, rising/ penetrating damp, leaky pipes and gutters, leaking pipes, taps, kitchen

and bathroom / toilet fittings ,poor ventilation, leaking drains.

[2]Excess cold

Usually caused by poor insulation and inadequate heating. This risk is greatest in properties built

before 1850, lowest risk properties built after 1980.

Action: check average indoor temperature

[3] Excess Heat:

Common causes are faulty central heating controls, large areas of southward facing glazing, heat

transfer from restaurants / light industrial heat extraction vents in same or adjacent building.

Action: check average indoor temperature

[4] Asbestos and Manufactured Mineral Fibres (MMF)

Particular problem in system build flats on high-rise council estates built from 1950 to 1970. Asbestos most commonly found as ducting covers internal and services trunking, water tanks and insulation for hot water tankage. MMF are found as part of sprayed insulation on internal walls.

Action: if these materials are identified check for lose/frangible fibres.

[5] Biocides

Chemicals used to treat timber and mould growth can be a danger to human health if they are inhaled, or by skin contact or swallowing. More likely to be problematic in older houses recently

refurbished.

[6] Carbon monoxide and fuel combustion products

Action: Check all appliances, flues and ventilation systems.

[7] Lead

Commonly found in older houses /industrial premises on flaking internal/external paint or in lead piping.

[8] Radiation

Radon gas is not detectable by any of the equipment that we have and is geo-physically rare in SE England.

[9] Uncombusted Fuel Gas

Action: check for a smell of gas from defective cookers or heaters and a lack of ventilation.

[10] Volatile organic compounds

The most common of these is formaldehyde, which is routinely used in wall and loft insulation in new or recently re-furbished homes.

[11] Crowding and Space

'A lack of adequate space for living and sleeping' currently defined under the Governments 'Bedroom standard' as the number of bedrooms needed so that no one has to share a bedroom unless they are(a) a couple (b)both aged under 10 or (c) both aged under 21 of the same sex. No more than 2 people should share 1 room.

Action: list number of bedrooms and all occupants including names, sex, DOB, relationship.

[12] Entry by intruders

Check location, external doors and windows for adequate locks, check for evidence of previous forced entry, internal / external lighting. In houses of multiple occupancy check common parts, access stairs, lifts and parking.

[13] Lighting

To reduce potential for accidents, trips and falls: check for suitable and adequate lighting inside and outside property including stairs, lifts and common parts.

[14] Noise

Action: ascertain cause and times of any reported noise nuisance, assess adequacy of sound insulation.

[15] Domestic hygiene, pests and refuse

Action: check for inadequately stored/accumulated refuse, ill fitting doors/windows, kitchen cabinets, service ducts, drain covers/gratings, broken airbricks etc. allowing access for insects, rodents, squirrels, cats, dogs other pets to areas where food is stored /prepared.

[16] Food Safety

Check for adequate provision of facilities for the storage, preparation and cooking of food. Ensure each household has access to cooking facilities and with adequate /lockable food storage facilities, adequate access to cooker, sink, fridge and food preparation area. Ensure there are arrangements for cleaning shared kitchen facilities

[17] Personal hygiene, sanitation and drainage

Ensure property has adequate facilities for personal hygiene sanitation and drainage. Action: assess household's access to washing, bathing, showering, clothes washing facilities. Check adequacy relative to occupancy, check condition of personal washing, bathroom, shower and toilet facilities for privacy, security, heating, ventilation, leaks, damage, discharge of foul waste into public areas, gardens, pathways etc.

[18] Water Supply

Actions: ensure for pipe work is installed and maintained to BS6700 and Water Supply Regulations 1999. Ensure water tank is covered and not leaking. Advise if water tank made of asbestos cement.

[19] Falls associated with bathing/washing.

Take history, identify risk factors, measure, photograph and do floor plan for occupational therapy.

[20] Falls on level surfaces

Action: take history, identify risk factors, measure, photograph, and do floor plan for occupational therapy.

[21] Falling on stairs

Assess risk, photograph and advise appropriately. Ensure that fire escapes are not compromised by dialysis equipment.

[22] Falling between levels

Take history, identify risk factors, measure photograph and do floor plan for occupational therapy.

[23] Electrical Hazards

Check wiring meets IEE BS76712 requirement. Check condition and number of sockets, earths, condition of electrical installation, distribution boards, individual loading per room and total loading of all rooms.

[24]Fire

Check for working smoke and fire alarms, fire detection systems, fire extinguishers, fire blankets in kitchens, emergency lighting, marked fire escape routes, fire safety Certification

[25] Flames and hot surfaces etc.

Commonly caused by location of cooking or kitchen equipment, taps with water above 60° C. or exposed hot water or central heating pipes.

Action: assess risk, photograph and advise appropriately.

[26]Collision and entrapment

Ensure easy evacuation route in property and ensure that fire escape routes are not compromised by dialysis equipment.

Action: assess risk, photograph and advise appropriately.

[27]Explosion

In the event of an explosion at the property: call Emergency Services immediately.

[28] Position and operation of amenities

Actions: document the position, location and operation of amenities

[29] Structural collapse and falling elements

Action: check for evidence of fallen brickwork, roofing tiles, collapsed roof trusses, chimneys, ceilings and floors. Check for bowed external walls and extensive water penetration.

These houses would under previous legislation be classified as unfit for human habitation. Action: liaise with social services to relocate occupants to appropriate accommodation or placement.

Housing Health and Safety Rating System

Guidance for Landlords and Property Related Professionals



Housing Health and Safety Rating System

Guidance for Landlords and Property Related Professionals On 5th May 2006 the responsibilities of the Office of the Deputy Prime Minister (ODPM) passed to the Department for Communities and Local Government.

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Further copies of this publication and alternative formats are available from:

DCLG Publications PO Box 236 Wetherby West Yorkshire LS23 7NB Tel: 08701 226 236

Fax: 08701 226 237 Textphone: 08701 207 405 Email: odpm@twoten.press.net

or online via the website: www.communities.gov.uk

Printed in the UK on material containing no less than 75% post-consumer waste.

ISBN-10: 185 112 8565 ISBN-13: 978 185 112 8563

May 2006

Reference No: 06 HC 03928

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Introduction to the Guidance

This document has been prepared in light of the Housing Act 2004 (the Act) for those owners and landlords who have a limited number of properties. The Act changes the way local authorities will assess housing conditions. They will now look at the condition of properties using a risk assessment approach called the Housing Health and Safety Rating System (HHSRS). This HHSRS does not set out minimum standards. It is concerned with avoiding or, at the very least, minimising potential *hazards*. This means that landlords should also review conditions regularly to try to see where and how their properties can be improved and made safer.

This guidance is aimed at non-specialists, in particular private landlords, because their properties are most likely to undergo an HHSRS inspection. In addition to their statutory duty to keep the housing conditions in their area under review, a local authority also has a duty to inspect a property if they consider it appropriate to do so. And an authority must also consider whether there is any action it might need to take under HHSRS in relation to HMOs which are subject to mandatory licensing — it must do this as soon as is reasonably practicable following a licence application, and in any event within five years.

Part 1 of the Act provides local authorities with new duties and powers to tackle poor housing conditions. The idea behind the Act is that local authorities will give priority to dealing with the greatest risks to health and safety in *dwellings*.

When local authority officers inspect a dwelling they will look for any risk of *barm* to an actual or potential occupier of a dwelling, which results from any *deficiency* that can give rise to a hazard. They will judge the severity of the risk by thinking about the *likelihood* of an occurrence that could cause harm over the next twelve months, and the range of harms that could result. The local authority officer will make these judgements by reference to those who, mostly based on age, would be most vulnerable to the hazard, even if people in these age groups may not actually be living in the property at the time. This means even a vacant dwelling can be assessed and that if the dwelling is rated as safe for those considered to be most vulnerable it will be safe for anyone. The HHSRS score is calculated following an inspection. The score does not dictate what action will be taken by the local authority to remedy the hazard. The government has issued statutory Enforcement Guidance to local authorities on the actions that they can take and the factors they should consider to decide which action is the most appropriate (a brief explanation at page 14 of this guidance).

Officers will use the formal scoring system within HHSRS to demonstrate the seriousness of hazards that can cause harm in dwellings. The scoring system for hazards is prescribed by the Housing Health and Safety Rating System (England) Regulations 2005 (SI 2005 No 3208) and is also set out in the statutory HHSRS Operating Guidance for local authorities. The Regulations can be obtained from the Stationery Office, while the Operating Guidance is available from the publications sales centre in Wetherby. If there are risks to the health or safety of occupants that the officer thinks should be dealt with, owners and landlords will have to put

matters right. If the officer finds a serious hazard (i.e. one in the higher scoring bands A – C, called a Category 1 hazard in the Act) the local authority will be under a duty to take one of the courses of action outlined in the section on enforcement in this Guidance. Category 2 hazards (i.e. those in scoring bands D - J) will be ones that the officer judges are not as serious. For these less severe hazards local authorities will still be able to take action if they think it necessary.

It is believed that responsible landlords will need, and want, to be able to identify those factors that may increase the likelihood of an occurrence and affect the spread of harm. This guidance is to help them to understand **what** local authority officers are inspecting for and **how** they assess the dwellings. This should help landlords to identify those areas where they need to do necessary work before the local authority carries out an inspection and requires remedial works. Definitions of some of the terms used in this guidance are given in Appendix 1.

The landlord's responsibilities

The landlord has to look after:

- a) The exterior of the dwelling and structural elements of the dwelling, and
- b) The inside facilities which are part of the dwelling.

INSTALLATIONS INSIDE THE DWELLING THAT ARE LOOKED AT

- Water, Gas and Electricity. These items must have whatever is needed for
 their proper use. All equipment necessary to supply these utilities must be fully,
 safely and correctly installed. Any removable equipment or appliances which
 use gas or electricity are not counted as "installations" unless these are
 provided by the landlord.
- **Personal Hygiene** covers installations such as proper wash hand basins, showers and/or baths.
- **Sanitation and drainage** covers lavatories, WC basins, drains, waste pipes, rainwater goods, inlet gullies and inspection chambers.
- Food safety covers sinks, draining boards, work tops, cooking facilities (or cooker points and space for cooking facilities), cupboards and/or shelves for storing cooking and eating utensils and equipment. It also includes food storage facilities (which these days are usually just electricity sockets and refrigerator space).
- Ventilation covers elements such as airbricks, trickle vents, opening lights to windows and mechanical and non-mechanical ventilation equipment.
- **Space and water heating** installations covers any kind of fitted space heating appliance(s) or central heating system. Moveable heaters provided by the occupier are not included. Installations for heating water cover any kind of fitted water system for providing the instant or stored heated water. Kettles and other appliances of that kind are **not** included.

Identifying hazards

Hazards arise from faults or deficiencies in the dwelling which could cause harm.

An understanding of two things is needed when it comes to recognising and testing for hazards.

- The basic physical and mental needs for human life and comfort, and
- How the dwelling as a whole, and each individual element in the dwelling has an effect.

In short, a dwelling should be able to supply the basic needs for the everyday life of the range of households who could normally be expected to live in a dwelling of that size and type.

The dwelling should not contain any deficiency that might give rise to a hazard which interferes with, or puts at risk, the health or safety, or even the lives, of the occupants.

So, to test whether a deficiency is connected to one or more hazards what is needed are:

- a) An understanding of the functions and workings of each element of the unit, and
- b) The ability to assess or test whether the deficiency will cause a hazard.

Causes of hazards

The first step in checking the state of a dwelling is an inspection to identify deficiencies that could cause problems for the dwelling as a whole.

It might be that the deficiency arises because of the way the dwelling was designed or built in the first place, or because of wear and tear, or because of a lack of care and repair over a period of time. As far as HHSRS is concerned, a deficiency becomes important when it can be seen that its effect is able to cause harm, i.e. when it results in a hazard. It is possible for **a single** deficiency to have an effect on, or contribute to, more than one hazard. For instance, a badly maintained ceiling could lead to the hazards of:

- **Excess cold** (because of increased heat loss),
- Fire (by allowing fire and smoke to spread to other parts of the dwelling),
- Lead (from old paint),
- **Domestic hygiene, pests and refuse** (by providing access and breeding places for pests, which are a source of infections), and
- Noise (because of an increased passage of sound between rooms).

So, a single deficiency can have a greater or lesser effect on a particular hazard.

Again, **several** deficiencies may be responsible for or contribute to the same hazard. For example:

- A badly maintained ceiling,
- A door that does not fit properly, and
- The absence of a smoke detector.

Each may contribute towards the single hazard of **fire**, helping smoke and flames to spread to other parts of the dwelling without being detected.

Alternatively, there may be similar kinds of deficiencies in different places in the dwelling which will have an effect on the same hazard. For instance, there might be dampness in the walls of several rooms within the dwelling. In this case the addition of those deficiencies of damp and mould growth will influence the assessment of the severity of the hazard, so the more widespread the damp and mould the greater the likelihood that harm could be caused.

Again there may be deficiencies to steps to the entrance path to the dwelling or to the main stairs inside the dwelling or to the rear steps. It is how far the combined effects of the deficiencies bring about the hazard of falls connected with stairs that will be assessed or tested.

Advice on what is to be looked at when assessing the possible contribution of a deficiency to a hazard can be found in the 'Causes and Preventive Measures' sections of the Hazard Profiles in the Appendices to this guidance (and can be found in more detail in Annex D to the HHSRS Operating Guidance).

Using the HHSRS means that even an unoccupied dwelling can be checked. It is the dwelling by itself which is checked, not the dwelling with the current occupants. So, the hazard score produced by the local authority officer stays with the dwelling even if there is a change of occupiers and stays until work has been done to minimise any hazards.

It is possible that, in some cases, the activities of occupiers of a dwelling may have an effect on the possibility of a hazardous *occurrence* or upon how bad it would be if it occurred. Because under the Act the local authority will be concerned with making an owner take action to remove or lessen the effect of a hazard, the HHSRS looks only at those areas which come under the responsibility of the owner (or landlord) even where the owner lives in the dwelling. It may be that landlords will want to make sure that tenancy agreements set out what is required of tenants so as not to prejudice their own health and safety.

The landlord (or owner) is not responsible for the state of fixtures or fittings belonging to the occupier unless they have been taken over by the landlord (or owner) and are not removable.

What are hazard bands?

The full system used by local authority officers uses numbers to represent the likelihood of an occurrence as the result of a hazard and to represent the possible spread of harm. In this way a score is produced to reflect the inspecting officer's judgement as to the severity of a hazard, but these are more conveniently put into bands covering ranges of scores. The bands (and the scores) allow the severity of very different hazards to be compared, for instance damp and mould, with carbon monoxide.

The bands range from A (scores of 5,000 or more), which is the most dangerous and life threatening, down to J (scores of nine or less), the least. More detailed information about these can be found in the *HHSRS Operating Guidance*. The Act imposes a duty on local authorities to take appropriate action in relation to hazards falling in bands A - C (that is hazards with scores of 1,000 or over). Although not under a duty to do so, they are also able to act in relation to other hazards (those in bands D - J, scoring 999 or less).

Testing for or assessing the hazards

When a dwelling is being assessed for conditions which could cause a hazard the local authority officer should take account of:

- The average likelihood for a particular hazard for that type and age of dwelling given in the main guidance,
- Any deficiencies (i.e. conditions or faults) which may increase the likelihood of an occurrence, and
- How serious the outcome of such an occurrence will be to the age group(s) most at risk.

Any decisions made by the local authority officer about the likelihood of a hazard occurring in a dwelling in the next twelve months will be based on the deficiencies identified. When the officer has made that decision, a number is used to represent a range of likelihoods.

The range of different injuries and health conditions which could arise from the occurrence of a hazard has been put into four HHSRS classes based on how serious they are. As well as thinking about the likelihood, the officer will think about how severe would be the result of an occurrence. The inspector will calculate the severity of the result of a hazard by deciding which out of the four classes of harm is the most likely outcome, then which is next most likely and so on.

The numbers used to represent the officer's decisions on the likelihood and the outcomes are used to get a score. (Exactly how this is done is prescribed in the Regulations, as well as being explained in the *HHSRS Operating Guidance*.)

The cost of any work that might be necessary is not taken into account in scoring a hazard, it is only the danger to health or safety that is considered. In fact sometimes a very serious hazard can by put right quite cheaply – for example a safety catch on a dangerous window can make it safe.

If it is found that it is very likely that there will be an occurrence within the next twelve months which could have serious results for the age group(s) most at risk (e.g. where the score is 1000 or over) then the local authority must take the most appropriate action in relation to the hazard. Often this might mean that they will require the landlord to undertake whatever work they consider to be necessary to remove, or minimise, the risk.

HMOs – buildings which contain a number of flats or similar dwellings

The HHSRS is applied to any form of dwelling whether it is self-contained or not, in a large building or not. The local authority officer only has to examine the dwelling and the parts and areas, shared or not, which form part of that dwelling.

When rooms and areas are shared, the check or **assessment** has to look at any possible increase in the likelihood and/or outcomes which could happen as a result of the sharing. It must also take into account the number of other dwellings sharing rooms and areas. For instance, the chance of a risk of infection might be greater because of sharing, or a person living in the dwelling that is being rated may be under stress because of the sharing.

Guidance on enforcement action

INTRODUCTION

This part of the guidance offers a summary of the HHSRS enforcement guidance that has been given to local authorities. This is only meant to provide a straightforward introduction and explanation to the enforcement options. If more details are needed then see the full *HHSRS Enforcement Guidance*, or get advice from a competent expert.

An HHSRS assessment is the first step taken by local authorities if they believe a dwelling contains hazards. The assessment will inform the decision on the most appropriate action that an authority can take to remove or at least minimise any hazards.

The local authority will be guided by three main points when making an enforcement decision:

- a) The HHSRS hazard rating,
- b) Whether the local authority has a duty or power under the Act to take action depending upon how serious the hazard risk is, and
- c) The best way of dealing with the hazard having regard to the enforcement guidance.

The idea behind enforcement is to make the property safer for the range of potential occupants as well as for the current occupant. Whatever method of enforcement is chosen will be a means to this end. The local authority will need to take a view on whether hazards can or should be reduced, or removed entirely, how they might be removed or reduced, and if they cannot, what other action is necessary.

Local authorities are encouraged to comply with the Enforcement Concordat and give clear advice to the owner or manager on what is required of them and to provide an opportunity to discuss the circumstances of a case before formal action is taken.

Local authorities are under a duty to take action in the case of category 1 hazards. If necessary (or if the owner/manager requests) the local authority may carry out any necessary remedial work themselves and reclaim the costs. They also have powers to take action in the case of all category 2 hazards (i.e. those which carry lower risks).

Local authorities also have the power to make a reasonable charge as a means of recovering certain expenses incurred in taking enforcement action. There is no statutory limit but the charge needs to be reasonable.

HOW DOES THE LOCAL AUTHORITY IDENTIFY THE NEED FOR ACTION TO DEAL WITH HAZARDS?

This can be done:

- As a result of an overall assessment of the area (including a Neighbourhood Renewal Assessment, see the revised NRA manual on this, available from the Publications Sales Centre);
- As a result of a request by an individual, such as a tenant or the owner of an adjoining property;
- As the result of a complaint by another agency such as the Citizens Advice Bureau (CAB); and
- A result of a request for assistance by the owner or tenant to deal with various aspects of home repair, adaptation, or improvement.

A local authority has a specific duty to consider whether there are category 1 hazards in HMOs which are subject to mandatory licensing (those with three or more floors and five or more tenants). They should carry out this assessment as soon as is practicable after a licence application has been received and no later than five years.

The local authority can consider financial or practical or other non-enforcement procedures to help owners to deal with hazards. The approach to be taken by a local authority should be set out in their private sector housing policy that has to be published with summaries freely available.

Local authorities and landlords are encouraged to work together to maintain property in good repair, and enforcement is seen as a last resort.

Sometimes a programme of works is the best approach and the local authority has the power to make a judgment about priorities, i.e. dealing with the most serious problems first, and with less serious ones over a longer time frame.

ENFORCEMENT OPTIONS OPEN TO THE LOCAL AUTHORITY

First, the local authority will weigh up the risk from any hazard(s) in the dwelling that might affect the potential occupant most at risk. The authority will also consider matters such as the most practical solution, and the age of the property. In deciding the most appropriate enforcement method (but not for deciding whether a hazard exists), the authority will also consider matters such as cost of the works necessary to deal with the hazards. It will then take the most suitable form of action, which will be one of the following:

1. Serve an improvement notice

This is a possible course of action for dealing with category 1 or 2 hazards and must at the very least remove any category 1 hazard(s). It will not require work to start sooner than 28 days from when the notice is served. It may, if necessary, be suspended until an agreed date or event. For example it could be suspended until the current occupant moves out of the property. It can cover more than one hazard, and perhaps require different completion times. Once the necessary work has been done to their satisfaction, the authority must revoke the notice. Failure to carry out the required works in the Improvement Notice within the specified time frame is a criminal offence.

2. Make a prohibition order

This is a possible course of action which can be taken to deal with a category 1 or 2 hazard. It might prohibit the use of **part** or **all** of the premises for various specified reasons. This might be appropriate:

- Where the conditions are a serious threat to health and/or safety but practical repairs are not possible because of cost or other reasons;
- To limit the maximum number of people who occupy the dwelling because of defects or where the facilities, e.g. washing, sanitary etc., are unsatisfactory for the number of people who live there; and
- To prohibit the use of a dwelling to a particular vulnerable group (until such time as improvements have been made).

As with improvement notices, prohibition orders can also be suspended and made to come into operation after a specified event (such as when an occupant moves in or out of the property.

Someone who allows premises to be used against the terms of the order commits an offence.

The local authority will take a number of factors into account before serving a prohibition order, including:

- Listed or protected buildings,
- Neighbouring buildings,
- Potential alternative uses of the premises,
- Existence of a conservation or renewal area,
- The effect of complete prohibition on the well being of the local community and the appearance of the locality, and
- How easy it is to re-house displaced occupants.

3. Emergency action

Where there is a category 1 hazard and the local authority is satisfied that the hazard involves an imminent risk of serious harm to the health or safety of occupiers, the local authority can use emergency measures to get work done or prohibit the use of the dwelling (or a part) and so protect those occupiers. Using its powers the authority can carry out immediate remedial action, and though it is possible to appeal, in practice, any appeal is likely to be heard after the action has been taken. The authority can also serve an emergency prohibition order, which has immediate effect.

4. Serve a hazard awareness notice

This option is in the nature of advisory action where the authority wants to draw attention to the need for improvements. It could be a possible, though unusual, response to a category 1 hazard.

The notice must give details of the hazard concerned and what is needed to deal with it.

5. Demolition orders

Requiring the demolition of the property is another of the possible responses to category 1 hazards. In deciding whether to take this action, the authority looks at:

- How easy it is to re-house displaced occupants;
- The demand for and possible long-term use of the dwelling if the problem was put right;
- The possible use of the cleared site;
- The local environment;
- The suitability of the area for continued residential occupation;
- The effect of a cleared site on the appearance and character of the neighbourhood; and
- The Neighbourhood Renewal Assessment guidance.

6. Clearance

The local authority may look at the range of Category 1 hazards in a residential area and how far such buildings are dangerous or harmful to the health or safety of the people who live there.

In deciding whether an area is to be cleared the authority will take into account:

• The likely long-term demand for housing in the area;

- The number of houses where serious hazards cannot be put right;
- Building density and street patterns;
- The overall demand for, and availability of, housing in the wider neighbourhood;
- The number of hazard-free premises, residential and non-residential, in the same area;
- Whether it would be necessary to acquire land surrounding or adjoining the proposed clearance area, and whether this added land could be had by agreement with the owners;
- The presence of any listed buildings;
- The results of legal consultations;
- The effects of clearance on commercial premises; and
- The suitability of the after-use(s) of the site taking into account the wider neighbourhood, the degree of support by the local residents and the potential for private investment in the area.

WHAT ABOUT HMOS?

The same enforcement actions will apply to these as to other forms of housing but see the *HHSRS Operating Guidance* for more details.

APPENDIX I

List of words used in the document and their meanings

Note: The meanings given here are to help understand this guidance.

- Dwelling any place which is used or meant to be used for living purposes.
- *Element* any basic part or equipment of a dwelling such as a wall, window, staircase, bath, lighting or heating.
- *Deficiency* a failing of some kind when an element does not come up to an acceptable standard for whatever reason or is not present.
- *Harm* and *classes of harm*. This is a physical or mental effect, like an illness, condition, symptom or injury to a person's health. It also includes temporary illnesses and injuries. In HHSRS, harms are grouped into four *classes* depending on how bad they are.
- *Hazard* the danger that can happen as the result of a deficiency in the place and which could cause harm. (There are 29 categories of hazard in the HHSRS.)
- *Hazard* score a number given to an **overall** risk from a hazard.
- Hazard rating the band into which the hazard score falls.
- *Likelihood* how likely it is that something will occur to cause harm, especially to certain groups, **within twelve months** after the survey.
- Occurrence this is the occasion or length of time when a person is exposed to the hazard.
- *Risk* the link between the likelihood of an occurrence and the **ranges** of harms occurring during the following twelve-month period.
- Spread of Harms the range of possible health effects (i.e. classes of harm) which could occur. (These can be seen in greater detail in the HHSRS Operating Guidance).
- Vulnerable Group a particular group of people based upon age who could live in the dwelling for whom the risk of a hazard is greater than for most people. For the HHSRS it does not include those registered disabled.

APPENDIX II

Assessment Process

This is a suggested process that a landlord could adopt to minimise the chances of any unacceptable hazards.

1 Inspect property

- Room-by-room, checking elements, fixtures and fittings.
- Check common parts (e.g., stairs and shared rooms and amenities).
- Check outside the building, looking at the external elements, and the yards/gardens and paths.
- Record any deficiencies, disrepair or anything else that may give rise to a hazard.

- Check if any of the deficiencies and faults contribute to any one or more of the 29 hazards.
- Do deficiencies
 - (a) Increase the likelihood of a harmful occurrence? or
 - (b) Increase the severity of the harm?

3 Remedial action/work

- Decide what needs to be done to remedy deficiencies and to reduce risks as low as reasonably practicable.
- Work out a timetable for having works done.
- Some action may be very urgent where an immediate risk to current occupiers is identified, others may be less urgent.

4 Keep Records

- Record the programme of works.
- · Record date when works finished.

5 Review

- Check that hazards have been removed/minimised.
- Re-inspect property (return to **box 1**). (How frequently this needs to be done depends on the age and type of property, and whether there has been any change of occupants. Some elements or facilities will need to be checked more frequently than others or when required by law (e.g., gas appliances) or by an accreditation scheme.)

APPENDIX III

Profiles of potential health and safety hazards in dwellings

INTRODUCTION

The hazards are arranged in four main groups depending on the kind of threat to health. These groups are divided still further depending on the nature of the hazards themselves. Outline profiles for some of the more common or serious hazards are given here, together with a note on the other less common or serious hazards. (Greater detail and explanation for all hazards can be found in Annex D of the *HHSRS Operating Guidance*).

The profiles also summarise what can be done to help in the assessment of *hazards*.

For the more serious or common hazards, each profile gives:

- What the *hazard* covers the potential for harm from the *hazard* that can
 affect health and includes examples of typical injuries and illnesses which may
 result from it;
- What deficiencies might cause a hazard;
- What can help to avoid or minimise the *hazard*;
- The relevant matters affecting likelihood and harm outcome, i.e., those features of a dwelling which may increase the likelihood and the seriousness of the outcome of a *hazard*. In many cases the same dwelling features can affect both the likelihood of an occurrence and the severity of the outcome; and
- Hazard assessment i.e., advice on how to assess the seriousness of the bazard.

A Physiological requirements

Hygrothermal conditions

1 DAMP AND MOULD GROWTH

Includes threats to physical and mental health from:

- House dust mites
- Mould or fungal growth

Both are caused by dampness and/or high humidity.

Possible health effects

- Breathing difficulties caused by house dust mite and mould;
- Depression and anxiety because of the conditions;
- Asthma, rhinitis, etc.; and
- Fungal infection which could affect people taking treatment for cancer.

Causes of dust mite and mould and fungal growth

Both are related directly to dampness which is caused by:

- Reduced ventilation levels;
- Increased humidity, especially beyond 70 per cent; and
- Warmer indoor temperatures in winter because of dwelling design in renovated houses.

Preventive measures that could have a significant effect on **likelihood** and **harm outcomes** relating to **moisture production** and **ventilation**:

- Damp proof courses, membranes and detailing around doors and window openings;
- External fabric kept in good repair to avoid rain penetration;
- Frost protection for pipes and tanks;
- Properly installed baths, sinks etc., with

- Properly installed drainage;
- Properly installed and maintained rainwater goods;
- Properly ventilated roof and under floor spaces to ensure timber remains air dry;
- Adequate extraction of moisture laden air during peak times, like cooking and bathing and laundry;
- Continuous low-level background ventilation where necessary;
- Sufficient means of ventilation to cope with moisture from normal domestic activities without the need to open windows that could lead to heat loss, noise and security risks; and
- Appropriate ventilation for dwellings of high occupant density.

Indoor temperatures

If most of the conditions above are met then raising indoor temperatures, taking into account energy efficiency and cost of heating, can significantly reduce dust mite problems. So an efficient heating system appropriate for the fabric (thermal properties) of the building is important.

Hazard assessment

There are many variables, such as design, condition and repair of the dwelling, as well as location and prevailing weather, room sizes and so on, that can make assessment difficult.

What about flats and HMOs?

Preventive measures are particularly important here because of the likelihood of occupants having to be more confined to one or two areas; thus making them more vulnerable to any dampness etc., that might be present.

2 EXCESS COLD

This covers the threats to health when temperatures fall below the minimum satisfactory levels for relatively long periods.

Health effects.

A healthy indoor temperature is around 21°C. There is small risk of health effects below 19°C. Below 16°C, there are serious health risks for the elderly, including greatly increased risks of respiratory and cardiovascular conditions. Below 10°C a great risk of hypothermia, especially for the elderly.

Cardiovascular conditions (e.g. heart attacks and stroke) account for 50 per cent excess winter deaths. Respiratory diseases (e.g. 'flu, pneumonia, bronchitis) account for another third.

Excess cold can also cause an increase in blood pressure/reduce resistance to infection because of the effect of cold air on bronchial lining and immune system/worsen symptoms of rheumatoid arthritis.

Causes

- Main causes appear to be changes in outdoor temperature among other factors;
- Sleeping in cold bedrooms greatly increases health risk;
- Dwellings with low energy efficiency ratings (poor insulation);
- Greatest risk is in properties built before 1850, lowest in more energy efficient dwellings built after 1980;
- Absence of central heating/poor inefficient heating systems; and
- Excessive damp which reduces thermal insulation.

Preventive measures that can have an effect on likelihood and harm outcomes:

- Appropriate levels of thermal insulation to minimise heat loss. Level depends on location/exposure/relationship to other dwellings/buildings orientation;
- Appropriate heating system safely and properly installed and maintained and controllable by occupant;
- Appropriate/properly installed/maintained occupant controllable low-level background ventilation without too much heat loss/draughts;
- Means for rapid ventilation at times of high moisture production in kitchens/bathrooms through fans;
- Properly sited/sized permanent openings (e.g. air bricks/open-able windows); and
- Properly fitting butt-jointed floor boarding/doors/windows.

Note: there may have to be a 'trade-off' regarding windows because of security/external noise levels etc.

What about flats and HMOs?

Centrally controlled space heating systems should operate in a way that makes sure occupants are not exposed to cold indoor temperatures. Occupants should be allowed to control temperature within their dwelling

Hazard assessment

- Dwelling is assessed on the basis that it is fully occupied by the most vulnerable age group;
- Only the dwelling characteristics/energy efficiency/effectiveness of the heating system are considered as these are within the control of the owner; and
- Other factors such as dampness/disrepair to the structure/space/water heating systems.

3 EXCESS HEAT

This category includes threats from excessively high indoor air temperatures.

Effects on health as temperatures rise

Include increase in thermal stress, increase in cardio vascular strain and trauma, and increase in strokes. Mortality increases in temperatures over 25°C. Although not common, problems can occur in the UK.

Causes

- Ventilation conditions;
- Thermal capacity of the dwelling smaller dwellings are more prone than larger;
- Large areas of south facing glazing; and
- Faulty or sub-standard heating controls.

Helpful preventive measures that could have an effect on **likelihood and harm outcomes:**

- Large areas of south facing glazing could have shuttering or blinds to control heat in summer months;
- Means of cooling during hot summer weather, either by natural ventilation or air conditioning; and
- Controllable heating systems.

Hazard assessment – should take account of:

- Provision for natural ventilation especially for night-time;
- Provision/condition of any mechanical ventilation/air conditioning system;

- Level and position of insulation;
- Extent and direction of glazing; and
- State of repair of heating system.

What about flats and other HMOs?

It seems that many flats and bedsits can be affected as these are more likely to be dwellings which:

- Are badly insulated;
- Those located directly under an un-insulated roof;
- Have only a south facing direction; and
- Have heating systems not under the control of the occupier.

Pollutants (non-microbial)

4 ASBESTOS AND MMF

Includes the **presence** of and **exposure** to asbestos fibres and Manufactured Mineral Fibres (MMF, which include rockwool and glass fibre blankets) in dwellings. (White, blue and brown forms of asbestos fibres are included, that is chrysotile and both forms of amphibole.)

Health effects

These typically tend to occur a long time after first exposure. Inhalation of asbestos fibres can cause damage to the lungs and, at the more extreme, cancers. They can affect the pleura (the protective membrane surrounding the lungs) causing plaques and fibrosis – not in themselves harmful but may point to something more serious. These are included as Class IV Harms. They can also cause forms of fatal lung cancer, including mesothelioma. MMFs are skin, eye and respiratory irritants and may cause dermatitis. There is some uncertainty about whether they can cause lung cancer.

Causes - Asbestos

- Part of a wide range of building products found in most traditionally built houses and flats. Generally in locations not likely to be disturbed so airborne fibre levels tend to be low;
- More of a problem in non-traditionally or 'system built' flats built between 1945 and 1980, because of sprayed coatings and partitioning as well as chrysotile materials in positions at risk from damage or disturbance. So, airborne fibre levels are higher; and
- Buildings most affected are high-rise council estates built in the 1950s and 60s.

MMF

Mostly used in loft and cavity wall insulation.

Modern products release few, if any, fibres and are not bio-persistent so risk is minimal.

Preventive measures that could have a significant effect on **likelihood and harm outcomes** relating to:

Asbestos:

 Damaged or likely to be damaged or disturbed asbestos should be assessed for repair, sealing, enclosure or removal by licensed (HSE) contractors;

- Existing asbestos can be managed in situ (covered or protected and the condition monitored) if it is in good condition and unlikely to be damaged/worked on/disturbed;
- Keeping a record of asbestos location in the building; and
- Protecting it from damage by occupants.

MMF:

Minimal possible exposure to fibres during maintenance/installation/removal.

Hazard assessment

Asbestos:

Should take account of:

- Its location,
- Potential for damage,
- Extent of any present damage for possible fibre release, and
- Checking whether *chrysotile* or more lethal *amphibol*.

MMF:

• Visual examination for damage/disturbance.

5 BIOCIDES

These are *chemicals* used to treat *timber* and/or *mould growth* in dwellings. (They are also used to kill pest infestations, such as *insects* and *rodents*, *however*, *these biocides are not considered for the purposes of the HHSRS.)*

Health effects

Figures are based on people living in new/refurbished dwellings as these are more likely to be at risk. The potential for harm to human health depends on the particular biocide which is being assessed. People are usually affected *by inhaling* but *skin contact* and *swallowing* can also be factors. Obviously the greatest risk is to the operatives who apply the chemicals, but occupants of treated dwellings can be at risk also. Guidelines and references may be found in the *HHSRS Operational Guidance*.

6 CARBON MONOXIDE AND FUEL COMBUSTION PRODUCTS (NITROGEN DIOXIDE, SULPHUR DIOXIDE AND SMOKE)

These are all linked to the (partial) combustion of gas, oil, solid fuels for heating and cooking in dwellings

Health effects – can vary

Carbon Dioxide

- Inability of blood to take up oxygen;
- Headaches, dizziness, nausea etc.;
- Some symptoms may be confused with 'flu' or depression;
- Increased chest pain in people with ischaemic heart disease;
- May impair foetal growth; and
- High concentrations can cause unconsciousness and death.

Nitrogen dioxide

- Respiratory damage;
- Aggravated asthma; and
- Increased risks of bacterial and viral infection of the lung

Sulphur dioxide

- Bronchitis and breathlessness as a result of open fires;
- Aggravated asthma.

Causes

All these result from an incomplete or improper combustion of the fuel or blockages or other defects to the flue.

Carbon monoxide in dwellings:

• Incomplete combustion of all fuels containing carbon, gas, oil and solid fuels.

Nitrogen dioxide

Produced by gas and oil burning appliances.

Sulphur dioxide

 Has a distinct smell and produced mainly by oil and solid fuel burning appliances.

Additional comments

- Open flued appliances can discharge combustion gases back into rooms which contain too powerful extractor fans;
- Flueless appliances including cookers;
- Appliances in disrepair;
- Inadequate ventilation;
- Ventilation in disrepair;
- Flues not properly serviced/cleaned/maintained;
- Flues in disrepair;
- Inappropriate flue outlet sites;
- Extractor fans in dwellings with open flued appliances; and
- Lack of/defects in carbon monoxide detectors.

Preventive measures affecting likelihood and harm outcomes relating to:

Carbon dioxide, nitrogen dioxide, sulphur dioxide

- Proper installation and maintenance of gas/oil/solid fuel burning appliances;
- Adequate air supply for such appliances;
- Proper siting and connection with adequately sized flues;
- Adequate ventilation in rooms with such appliances;
- Regular maintenance of flues;
- Gas heating appliances to be fitted with flues for correctly balanced flow of air inside and out;
- Ventilated lobby between integral garage and living accommodation; and
- Properly sited and maintained carbon monoxide detectors.

Hazard assessment should be:

- Visual inspection of gas/oil/solid fuel appliances to check if the fuel is burning properly;
- Visual inspection of flues, particularly for smoke or soot stains around joints;
- · Visual inspection of ventilation arrangements; and
- Further investigation and safety report from a qualified engineer if there are indications of above average risk.

7 LEAD

There are two main sources around dwellings – *paint* and *water pipes*. Other sources of lead might include *soil*, especially around older buildings with *flaking external paintwork* and areas around *industrial premises* using (or having previously used) lead. There may also be lead traces in soil close to busy roads because of the exhaust fumes from leaded petrol.

Health effects

When lead is taken in it builds up in the body. It is known to have *toxic effects* on the nervous system and blood production. It is known to have a detrimental effect on mental/intellectual development causing mental retardation and behavioural problems in children.

Figures show that children are particularly vulnerable to this hazard because of the ease with which their physiology accepts lead.

8 RADIATION

The main source of *barmful radiation* in dwellings is from *radon gas*. Radon is colourless and odourless, and it is not possible to detect it, either in the air or the water, without testing and measurement. Radon can be dissolved in water, particularly in private water supplies, but it is airborne radon that poses a more significant threat.

Health effects

Probably the second most important cause of lung cancer after smoking, by-products or radon decay enter the lungs and initiate cancer. Figures indicate that five per cent of lung cancers could be traced to residential radon exposure. There is a possibility also of malignancies (e.g. leukaemia/acute lymphatic leukaemia/skin cancer). Variations in radon gas exposure depend to a great extent on geographical location where some regions are more affected by radon occurring naturally than others.

9 UNCOMBUSTED FUEL GAS

This *hazard* includes the threat of *asphyxiation* resulting from the escape of fuel gas into the atmosphere of a dwelling.

It does *NOT* include hazards linked with poisoning associated with *incomplete combustion* of gas back into a dwelling, nor *explosions* resulting from un-combusted fuel gas.

Health effects

Asphyxiation when the occupants are unable to breathe because of the build-up of unburnt fuel gas in the dwelling. The critical oxygen level is 14 per cent (normal levels being around 21 per cent).

10 VOLATILE ORGANIC COMPOUNDS (VOCS)

Are a range of organic *chemicals* that are *gaseous* at room temperature and found in a wide variety of materials in the home.

Formaldebyde is included in this hazard. People in newly built/refurbished dwellings are most likely to be exposed to VOCs.

Hazard effects

Some may cause *short-term irritation* and *allergic reactions* to the eyes/nose/skin/respiratory tract.

Higher concentrations can result in *headaches/nausea/dizziness/drowsiness*. VOCs can aggravate asthma.

B Psychological requirements

Space, security, light and noise

11 CROWDING AND SPACE

Includes all the hazards associated with *lack of space and crowding*. It takes into account the *psychological needs* for both *social interaction/privacy*. It also looks at the effects of crowding on space requirements for household activity.

It does *not* include any assessment of the provision of sanitary/kitchen facilities in relation to the dwelling. These are looked at elsewhere (see Personal Hygiene/Food Safety, Profiles 16 and 17)

Health effects

Crowding and lack of space has been linked to *psychological distress and various* mental disorders. It is also linked to *increased heart rate*, *increased perspiration*, *intolerance*, *inability to concentrate*, *bygiene risks*, *accidents and spread of contagious disease*.

12 ENTRY BY INTRUDERS

This hazard is concerned with keeping a dwelling secure against unauthorised entry and maintaining its safety.

Health effects

These include mental harm/stress/anguish (emotional impact after burglary affects more than 75 per cent of victims). The worry and fear of being burgled tends to be caused by knowing people who have been burgled and by publicity about crimes (assessed as Class IV harm). Injuries where the victim is attacked by the burglar (aggravated burglary).

Causes

- Location where local area has high levels of poverty and crime;
- Poor lighting around dwelling area;
- Doors and windows poorly constructed/fitted/in disrepair/inadequate locks;
- Lack of viewers to external doors:
- Lack of/broken security chains to external doors;

- No caretaker/entry phone system to block of flats; and
- Lack of/defective burglar alarm systems

Preventive measures that can affect **likelihood** and **harm outcomes**:

- Design of estate/area around dwelling to reduce hiding places, as far as possible (e.g. fences etc.) for burglars and intruders;
- Well-lit and defined pedestrian routes;
- Dwelling made safe against unauthorised entry so as to delay and deter intruders and make the occupants feel safer;
- Window locks/dead locks;
- Security lights/indoor grilles; and
- Spy holes/chains on entrance doors.

Hazard assessment

Links level of physical security features at dwelling to local overall crime rate. Fear of crime as well as risk of actual burglary should be taken into account.

Note: Balance has to be made between security risks from other hazards, e.g. locked doors and windows and means of escape in the case of fire.

What about flats and HMOs?

Concierge, caretaker systems and entry-phone controls have been found to reduce crime/fear of crime.

Assessment should look at whole building security as well as that between individual residents of the same building.

13 LIGHTING

Includes threats to *physical and mental health* associated with *inadequate natural/artificial light*.

It also includes the *psychological effect* linked with the *view through glazing* from the dwelling.

Health effects

Figures suggest that 100,000+ people are affected by Class IV harms annually.

Distinct types of health conditions can be caused by inadequate light, e.g. *depression and psychological effects* because of lack of natural light/lack of window with a view/stress caused by intrusive artificial external lighting at night.

Eyestrain from glare and lack of adequate natural/artificial light. Discomfort caused by certain types of artificial light/possible photo convulsive reactions.

14 NOISE

This includes threats to physical and mental health from exposure to noise in the home caused by a lack of sufficient sound insulation. It does not cover unreasonable noisy behaviour of neighbours (domestic or commercial).

Health effects

Figures show that a significant number of people have problems with noise from road traffic/neighbours/people outside. Men tend to react with outwardly directed aggression/annoyance/aggravation/bitterness/anger etc. Women tend to suppress their reactions saying they are <code>tense/fraught/anxious</code>. It appears that night-time traffic noise is more dangerous to health than day-time noise exposure.

Noise can affect both physical and mental health. Physical health effects include raised blood pressure and headaches. Mental health effects include *stress/sleep disturbance, lack of concentration/anxiety*. In extreme cases, victims can be driven to *suicide* and *assault* due to *aggravation*.

Causes

- Noise tolerance may in part be determined by age/sex/working status/lifestyle/ personality; and
- Noise levels can be measured, but people differ in what sources they find offensive.

Tolerable

• Neighbours in daytime, some traffic noise or routine home deliveries.

Intolerable

- Loud, continuous or apparently unnecessary noises which seem to go on indefinitely;
- Seemingly inconsiderate noises, especially at night;
- Emotive, frightening noises, shouting or violent rows;
- Night time traffic noise;

- Location of dwelling in particularly noisy environment;
- Inadequate internal insulation;
- Inadequate levels of external sound insulation;
- Disrepair of windows/internal/external doors allowing increased noise penetration;
- Inappropriate siting of plumbing/fittings/facilities;
- Noisy equipment or facilities; and
- Overly strong door closers resulting in banging.

Preventive measures that can affect likelihood and harm outcomes

- Double/secondary glazing and lobbies to external doors where there are high outside noise levels (e.g. traffic);
- Possible triple glazing near airports/sources of very high noise levels;
- Insulation of upper floor/ceiling/roof space where aircraft noise is likely;
- Plumbing from WCs/cisterns sited away from separating walls;
- Bathrooms/WCs in flats not sited above living rooms/bedrooms; and
- Better construction/conversions of partitions and party walls especially in flats/maisonettes.

Hazard assessment (with noise meters if possible)

- Overlap of domestic noise between one dwelling and another (e.g. toilet flushing/television/conversation etc.) will be assessed for poor sound insulation; and
- Traffic/other external noise also considered.

C Protection against infection

Hygiene, sanitation and water supply

15 DOMESTIC HYGIENE, PESTS AND REFUSE

This is concerned with protection against infection.

Includes hazards resulting from:

- Poor design/layout/construction of the dwelling so that it is difficult to be kept clean and hygienic;
- Access into and harbourage within the dwelling for pests; and
- Inadequate and unhygienic provision for storage and disposal of household waste.

Note: hazards connected with sanitation and drainage, domestic water, personal washing facilities and food safety are considered in other profiles.

Health effects

These can include *gastro-intestinal disease* (from spread of infection), *asthma* and other allergic reactions (from allergens), *stress* (because of difficulties in keeping the home clean and from accumulations of refuse) *food spoilage* from insect *infestation* (e.g. cockroaches), *infections* (spread by insects and rats and mice) and *nuisance*.

Causes

- Inadequately stored/accumulated refuse allowing access to insect/rodent/pests/birds/squirrels/foxes/cats/dogs;
- Service ducts and holes around pipes e.g. central heating harbour insects and provide access between dwellings in blocks;
- Access to open drains by rodents;
- Access for rodents by means of ill-fitting doors and windows;
- Uneven and/or cracked internal walls and/or ceilings allowing access for pests;
- Missing/damaged brickwork including airbricks to external walls and other disrepair to external walls and roof;
- HMOs are particularly vulnerable to certain kinds of insect pest.

Preventive measures that can affect likelihood and harm outcomes:

- Design/construction/subsequent maintenance of building should help it to be kept clean preventing build-up of dirt and dust;
- Personal washing/sanitation/food preparation/cooking/storage areas should be capable of being maintained in a hygienic condition;
- Reduction of the means of access by pests into buildings to a minimum;
- All internal surfaces easily cleaned/pest resistant material to be used where possible;
- Dwelling exterior free of cracks and unprotected holes, otherwise grilles/other methods to be used for protection;
- Service ducting/roof/floor spaces to be effectively sealed but with suitable access if treatment is needed;
- Drain openings, WC basins to be sealed with an effective water tight seal;
- Drainage inlets for waste and surface water to be sealed;
- Any points in walls penetrated by waste, drain or other pipes or cables to be effectively sealed;
- Holes through roof coverings, eaves and verges to be blocked to deny ingress to rats/mice/squirrels/birds. Necessary holes to be covered by grilles;
- Adequate and closed storage for refuse awaiting collection or disposal outside dwelling;
- Suitable storage for refuse within the dwelling;
- Storage to be accessible to occupants but not be a danger to children; and
- Refuse facilities should not cause hygiene problems.

What about HMOs?

- Should be a clearly defined area for refuse containers in the open air/away from windows/ventilators, and in shade or shelter;
- Chutes may be used or waste storage containers with free ventilation;
- Communal chutes are recommended with HMOs of more than four-storeys. Should discharge into large containers within a store;
- Stores should be designed to reduce invasion by pests; and

• Should be designed so as not to let air from the store enter any living space.

Hazard assessment

Considers the overall combined risk from possible infestations and problems connected with refuse disposal and domestic hygiene generally.

16 FOOD SAFETY

Includes threats of infection resulting from inadequacies in provision and facilities for storage/preparation/cooking of food.

Health effects

- Food poisoning ranging from mild stomach upset to death from infectious gastro intestinal disease;
- Severe diarrhoea/vomiting/dehydration;
- Fifty per cent of food poisoning cases annually arise in the home.

Causes

- Cracks/chips/other damage to internal surfaces of sinks and worktops prevent thorough cleansing and permit pathogenic and food spoiling organisms;
- Damp affected surfaces may degrade and become crumbly/flaky and support growth of micro-organisms;
- Humid conditions can cause food to decay more quickly;
- In HMOs tends to be more confusion over responsibility for kitchen cleanliness;
 and
- In HMOs higher risk of infection where higher number of people share facilities.

Preventive measures that can affect likelihood and outcomes

Generally kitchen facilities should be in a properly designed room or area to cater for safe and hygienic preparation and cooking of food.

Storage

- Suitable storage for food to slow down deterioration and decomposition;
- Facilities should be of adequate size for the number of occupants for hygienic storage of fresh foods;

- Should be facility for food cupboard/larder and refrigerator and freezer with appropriate sockets;
- Such facilities should have smooth impervious surfaces for easy cleaning and maintaining in hygienic condition;
- Separate shelves for different foods; and
- Facilities should be cool and dry and protected from direct sunlight.

Preparation areas

- Should be adequate sized sink/dual sink free from cracks/chips/other damage plus drainer;
- Hot and cold water;
- Suitable drainage for waste water;
- Suitably sized work tops, securely fixed; smooth impervious surface, easily cleanable; and
- At least four appropriate power sockets associated with the worktop(s) as well as two for general use.

Cooking

- Facilities should be of adequate size for the household with appropriate connections for fuel (gas or electricity);
- Should be capable of being readily cleansed and maintained in hygienic condition.

Design, layout and state of repair

- Kitchen floor should be reasonably smooth and impervious for easy cleaning and maintaining in a hygienic condition;
- Corners and junctions should be sealed and covered to avoid uncleanable junctions;
- Wall surfaces should be smooth, or with impervious finish and easily cleaned, especially those adjacent to cookers/sinks/drainers and worktops;
- Joints between sink/drainer/worktop and adjacent wall should be sealed and water tight;
- Layout/relationship of facilities should ease the stages of preparation, cooking and serving;

- Adequate and appropriate lighting especially over the facilities; and
- Suitable ventilation of whole of kitchen area, especially the cooking area.

What about flats and HMOs?

Much the same provisions as for single dwellings but shared facilities need adequately sized oven/hob/space.

Hazard assessment will focus on:

- Facilities available,
- Ratio of facilities to (potential) occupants,
- Ease with which safe food practice can be maintained by occupants,
- Whether people using kitchen are part of same household or not, and
- That shared facilities increase risks because of lack of communication/co-operation.

17 PERSONAL HYGIENE, SANITATION AND DRAINAGE

Includes threats of infection/threats to mental health associated with the above, including personal washing and clothes washing facilities.

Health effects

These include:

- Gastro-intestinal illness; more rarely skin infections. Mild stomach upsets through to death from diarrhoeal and gastro-intestinal disease;
- Severe dysentery (between 2,000 and 20,000 notified cases per annum);
- *Stress and depression* resulting from poor maintenance, particularly where occupant has little control over the situation; typically the situation in rented dwellings and where facilities are shared.

Causes

Personal hygiene/sanitation

- Deficiencies within the facilities themselves increase the risks/excessive sharing of facilities such as too few sanitary closets for number of occupants;
- Cracks/chips/other damage to internal surfaces of facilities; and

Possibly hands in contact with WC seat/basin.

Drainage

- Discharge of untreated foul waste onto paths/gardens; and
- Waste water discharged onto paths/gardens.

HMOs

- Increased risk of infection when sharing personal hygiene/sanitation facilities, especially where there is infectious illness in households;
- Higher risk of infection because of higher ratio of people to facilities;
- Possible leaking facilities may be unknown to the users but affect different dwellings in same building.

Preventive measures that could affect likelihood and harm outcomes

Personal hygiene

- Sufficient numbers of properly connected/fitted baths/showers for (potential) occupants;
- Bathroom/shower room to have privacy/heating/lighting/ventilation;
- Sufficient number of suitably connected and sited wash hand basins for occupants;
- Suitably connected, easily cleaned sinks with proper waste drainage for each dwelling/household; and
- Appropriate facilities for washing machine/clothes drying/adjacent power sockets/vent outlets.

Sanitation

Provision of

- Properly installed/securely fixed/easily cleansed WC basin with hinged lid/seat of impervious material;
- Connected to a properly working flushing system;
- Connected to proper/adequate drainage system;
- Number of sanitary closets to be related to number of levels in dwelling and the number of persons (irrespective of age);

- Sanitary compartments separate from bathrooms;
- Compartments/bathrooms to be ventilated to external air; and
- Lockable doors from inside to compartments/bathrooms but openable in emergency.

Drainage

- Wastewater to be discharged into properly designed trapped drainage inlets/vertical drains connected to the main sewerage system;
- Properly designed soakaways for private treatment or storage system for foul sewage;
- Systems to be ventilated to prevent siphonage of traps and facilities connected to sewer; and
- Surface water to be discharged into properly designed trapped drainage inlets connected to main drainage system.

Hazard assessment

Considers the **overall combined risk** from personal hygiene, sanitation and drainage.

What about flats and HMOs?

As is the case with all hazards, assessment is made for each individual dwelling separately and takes account of relevant deficiencies with shared facilities.

18 WATER SUPPLY

This is limited to the supply after delivery to the dwelling and concerned with water for drinking/cooking/washing/cleaning/sanitation.

Health effects

Main problems in the UK result from contamination of water:

- *Gastro-intestinal illness* associated with drinking water (campylobacter/cryptosporidium);
- Respiratory infection typically caused by legionella and commonest result of infection is an acute pneumonia (Legionnaires Disease) with 10 15 per cent of cases proving fatal.

Preventive measures that can affect likelihood and harm outcomes:

- Water pipework and storage facilities provided and maintained according to requirements of BS 6700;
- Plumbing systems to meet requirements of Water Supply Regulations 1999;
- Stored private drinking water supplies regularly sampled and analysed;
- Tanks covered to prevent ingress of contamination (i.e. birds/insects etc.);
- Appropriate materials used for pipework/storage tanks/fittings; and
- Proper maintenance of water filters and softening systems.

HAZARD ASSESSMENT

- Visual examination of the installations and fittings within the dwelling for supply of water, then checking the water visually and for odours;
- Quality;
- In HMOs checks to be made on temperature of water in pipes/cold water cisterns, hot water vessels/tap discharge; water sampling as appropriate.

D Protection against accidents

Falls

19 FALLS ASSOCIATED WITH BATHS ETC

Includes any fall associated with bath/shower/similar facility, whether that fall is on the same level or from one level to another.

Health effects

Most common injuries that result from bath falls are *cuts/lacerations/swelling/bruising/fractures*.

Possible death weeks/months after the initial injury as a result of *cardio-respiratory illness*, including *heart attack/pneumonia*.

20 FALLING ON LEVEL SURFACES ETC

Includes falls on any level surface such as floors/yards/paths.

Also trip steps/thresholds/ramps where the change in level is less than 300mm.

Health effects

Physical injury such as bruising/fractures/bead/brain/spinal injuries.

Extent of the injury depends on *distance of the fall/kind of surface fallen on* (e.g. stone/concrete/ceramic tiled floors/carpets etc.).

Following a fall, the health of an elderly person may deteriorate generally and death after an initial fall injury can be *cardio-respiratory*.

21 FALLING ON STAIRS ETC

Covers any fall associated with a change in level greater than 300mm and includes falls associated with:

- a) Internal stairs or ramps within the dwelling;
- b) External steps or ramps within the immediate area of the dwelling;
- c) Internal common stairs or ramps within the building containing the dwelling unit and giving access to the dwelling or shared facilities; and

d) External steps or ramps within the immediate area of the building which contains the dwelling unit and giving access to that dwelling or shared facilities.

Does not include trip steps/thresholds/ramps where the change in level is less than 300mm. These are assessed under falls on the level.

Health effects

Falls on stairs account for around 25 per cent of all home falls (fatal and non-fatal).

Physical injury, e.g. bruising/fractures/bead/brain/spinal injuries/possible death.

Nature of injury is dependent upon fall distance/age and fragility of the person/nature of surface struck. Ultimate/long-range consequences can be *cardio-respiratory/heart attack/stroke/pneumonia*.

Measures that will lessen the likelihood of hazardous occurrence and reduce harm outcomes

- Tread dimensions to be between 280mm and 360mm;
- Rise dimensions to be between 100mm 180mm;
- Pitch (angle of stairs) to be less than 42°;
- Stairs should be checked for above average steepness or shallowness;
- Consistency/uniformity in dimensions of rise and going within a flight (except for obvious change in direction of stair e.g. use of winders);
- Nosing should not project more than 18mm beyond any riser;
- Treads and nosings should provide appropriate friction (carpet etc., if possible);
- Provision of carpet/rug etc., at foot of stairs to help cushion possible impact;
- Openings in stairs or banisters should be less than 100mm;
- Avoidance of alternating treads, particularly those not conforming to current Building Regulations;
- Handrails/banisters must be provided either side of the staircase;
- Handrails to be sited between 900mm and 1000mm measured from the top of the handrail to the pitch line or floor/easy to grasp/extend the full length of the flight;
- Should be designed to prevent climbing;
- Stair width should be a minimum of 900mm-1000mm;

- Provision of adequate landing/floor space leading to the stairs (top and bottom) so user can check start/dimensions of stairs and steps;
- Adequate natural lighting to the top and foot of the flight;
- Adequate artificial light to the top and foot of the flight;
- Adequate and convenient means of controlling the artificial lighting;
- No glare from natural/artificial lighting;
- Avoid doors which open directly onto stairs or the head of the stairs causing obstruction or increasing the likelihood of a fall;
- Avoidance of projections and sharp edges on stairs and glass or radiators at the foot of the stairs;
- All elements of stairs should be kept in good repair; and
- Dwelling should be adequately heated and insulated to avoid impairment of movement and sensation.

Hazard assessment

All:

- Internal/external stairs;
- Stairs for the exclusive use of the dwelling occupants;
- Common stairs/external steps/fire escape stairs/ramps; and
- Where there are several flights of stairs or steps, overall risk of a fall on all the stairs and steps is to be considered taking into account fall risks on each of the different flights.

22 FALLING BETWEEN LEVELS

Includes falls between two levels within and outside a dwelling or building where the change in level is more than 300mm. Includes *falls from/out of dwellings*, e.g. windows/balconies/accessible roofs/over landing balustrades.

Also includes falls from any other change in level not served by stairs/steps (e.g. over the guard rails to galleried rooms/basement wells or to garden retaining walls).

Does NOT include falls from stairs/steps/ramps/chairs/tables/ladders.

Health effects

Physical injuries include: bruising/puncture injuries/fractures; head/brain/spinal injuries. Extent of injury depends partly on distance fallen and nature of the surface fallen upon.

Electric shocks, fires, burns and scalds

23 ELECTRICAL HAZARDS

Include hazards from shock and burns resulting from exposure to electricity but *not* risks associated with fire caused by deficiencies to the electrical installations, e.g. ignition caused by a short circuit.

Health effects

Shock effects range from *mild tingling sensations* to *disruption of normal heartbeat/respiratory muscles, causing death.* Can also cause *burns.*

Measures to lessen the likelihood of occurrence and reduce harm outcomes

- Electrical wiring installation meets the latest requirements of Institution of Electrical Engineers/British Standard (BS 7671) (Often available in local reference libraries);
- Adequate number of appropriately sited electrical socket outlets;
- Appropriately sited fuses and meters;
- Adequately earthed electrical system;
- Installation, i.e. supply/meters/fuses/wiring/sockets/light fittings/switches to be maintained in good repair;
- Electrical installations to avoid close proximity to water including areas of damp; and
- Lightning Protection System to be kept in good repair.

Hazard assessment

- A visual inspection of the electrical system and fixed appliances to identify obvious hazards;
- Where there appear to be deficiencies that increase risk above average, then a
 full inspection and test report by a qualified electrician/electrical engineer may
 be necessary in any event this may be desirable anyway at least every couple
 of years; and
- The condition of associated leads and plugs of portable appliances should also be taken into account in the assessment if they are provided as part of a rented dwelling.

24 FIRE

Includes threats from *accidental* (as opposed to arson) uncontrolled fire/associated smoke.

Health effects

More than 400 people die each year as a result of accidental fires and more than 11,000 are injured. As well as *burns*, *deaths* can be caused by gas, smoke or possible carbon monoxide poisoning.

Causes

Occupiers' reactions on discovering fire can possibly influence escape from fire, but factors in the cause of fire can include:

- Sources of ignition (cooking appliances/space heaters/electrical equipment);
- Solid fuel as main fuel leads to a higher likelihood of fire though with a lower fatality rate than from gas/electric space heaters;
- Electrical distribution equipment in poor condition; and
- Nature of harm influenced by presence/absence of automatic fire detection/alarm systems.

Preventive measures that could have an affect on likelihood and harm outcomes:

- Safe siting for cookers, away from flammable materials;
- Properly designed/installed/serviced/maintained space heating;
- Sufficient/appropriately sited electric socket outlets;
- Properly installed/maintained/regularly checked and tested distribution board and wiring;
- Residual Current Devices;
- Fire and smoke permeable resistant materials in design of the building where possible;
- Fire stops to cavities including ventilation and heating systems;
- Design and construction of the building to limit the spread of fire/smoke;
- Properly constructed/fitted internal doors with self closers where appropriate;

- Furniture to comply with current regulations (currently the Furniture and Furnishings (Fire) (Safety) Regulations 1988 as amended) in furnished accommodation:
- Detectors/smoke alarms properly designed/sited/maintained/regularly tested;
- Appropriately sited extinguishers and fire blankets (especially kitchen); and
- Means of escape from all parts of dwelling/building, e.g. openable door window/protected staircase etc./depending on height of building.

What about HMOs?

- More fires occur in flats than houses;
- Dwellings constructed after 1980 have a lower likelihood of fire;
- Dwellings constructed before 1920 have greatest likelihood of death/injury from fire;
- Risk increases with height/number of stores so:
- Adequate means of escape needed between each dwelling;
- Need for suitable interconnected fire detection/alarm system/emergency; and
- Emergency lighting and sprinkler systems etc.

Hazard assessment – considers

- Likelihood of a fire starting;
- The chances of its detection and its speed of spreading; and
- Ease and means of escape.

For HMOs – assessment takes account of

- Type/size of the building;
- Number of different dwellings;
- Each individual unit;
- Degree of fire separation between each dwelling; and
- Effectiveness/presence of detection/alarm systems/primary fire fighting equipment such as sprinkler systems.

25 FLAMES, HOT SURFACES ETC

This is concerned with injuries from:

- i) *Burns* which are caused by contact with a hot flame or fire or hot objects or hot non-water based liquids;
- ii) Scalds which are caused by contact with water-based liquids and vapours.

It also includes *burns* and *scalds* from spills during cooking or preparing hot drinks. It does **not** include burns from an **uncontrolled** fire at the dwelling.

HEALTH EFFECTS

Over 200 people a year die from burn and scald injuries. About half burn and scald injuries to young children happen in kitchens.

Causes

- Bare hot surfaces of 70°C or more;
- Unguarded open flames space or water heaters;
- Tap water too hot above 60°C;
- No heat control taps or heat controlled mixer taps and anti-scald fixtures wrongly set;
- Poor layout of kitchen space, especially where the cooker is in the wrong place; and
- Cooking area/kitchen not far enough from living or sleeping area.

Preventive measures that can affect likelihood of an occurrence

- Design and layout of the kitchen, including location of the cooker, the design and controls of heating appliances;
- Fires and heaters there should be protection from any open flame to prevent clothing catching alight;
- Surfaces should be covered if the temperature is more than 70°C;
- Ideally, hot water should be no more than 60°C in kitchens, 41°C for hand basins and 46°C for baths.

What about flats and other multi-occupied buildings?

Risk can be increased where the kitchen is shared and people are using it at the same time. If possible, there should be separate worktop space and separate cooking facilities for each dwelling.

Where cooking is done in a bedroom or living room there needs to be enough distance between the kitchen area and the sleeping or living area.

There should also be an adequate number of electric sockets in the kitchen area to cut down the risks of scalds.

Conditions that can affect the **severity of outcomes**:

- The temperature of the hot liquid or surface;
- The length of time the incident takes; and
- The length of time before first-aid is applied.

Hazard assessment

Consider

- Space and water heating arrangements at the dwelling;
- The temperature of the tap water; and
- Kitchen design and layout.

In a multi-occupied building where the kitchen is some distance from the dwelling there may be risks involved in carrying hot drinks and food between places.

Collisions, cuts and strains

26 COLLISION AND ENTRAPMENT

Includes threats of *trapping body parts* (e.g. fingers/limbs) in architectural features (e.g. doors/windows).

Also includes *striking* (colliding with) features such as glazing/windows/doors/low ceilings/walls.

Health effects

Statistics show a high number of such incidents as collisions and entrapments but window injuries tend to be worse, particularly when accidents result from cutting or piercing by glass.

27 EXPLOSIONS

Includes threats from debris created by the blast/partial or total collapse of the building as a result of the explosion.

Health effects

Incidence figures are low but, of course, explosions can result in extreme harm. Typical injuries include *crushing/bruising/puncture injuries/fractures; and head/brain/spinal injuries. Possible scalding* if a hot water appliance is involved.

28 POSITION AND OPERABILITY OF AMENITIES ETC

Includes threats of *physical strain* associated with functional space and other features at the dwelling.

It also includes *physical strain* which may result from avoidance of other hazards (see *Collision and Entrapment* and *Falls* hazards).

Health effects

Inappropriate positioning of amenities/fittings/equipment and the layout of dwellings can have a significant effect causing *strain/sprain fall injuries*.

29 STRUCTURAL COLLAPSE AND FALLING ELEMENTS

Includes threats of *whole dwelling collapse* and/or an element or a part of the fabric being displaced or failing because of inadequate fixing/disrepair or adverse weather conditions.

Structural failure can be internal, threatening the occupants or within the immediate external area putting members of the public at risk.

Health effects

Injuries caused by objects falling from the fabric of a building are extremely rare. Potential injuries range from *minor bruising to death*.

APPENDIX IV

Examples of how to assess hazards

The following pages give four examples of situations where hazards can be assessed. These are falling on stairs, fire, electrical hazards and hot surfaces. When you look at these, you should assume that if something about the dwelling is not mentioned then it has been considered to be satisfactory. You may wish to treat these examples as exercises to help you get into the idea of assessing hazards in dwellings that you let.

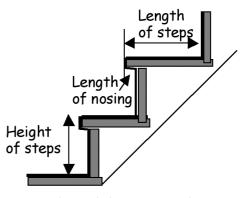
Falling on stairs

Vulnerable group Persons aged 60 years or over

Related hazards None



Stairs showing broken step



Section through lowest straight steps



View of stairs from landing



Narrow frontage house **Dwelling:** pre-1920 mid-terraced

DESCRIPTION OF HAZARDS

Main stairs: The stairs are located between the front and rear rooms in this poorlyheated, narrow-fronted, end-terraced house. The stairs are very steep and consist of four angled steps or winders at the bottom and then a straight flight of seven steps. On the straight flight, both the height of the steps and their length, front to back, vary, particularly on the lower steps in this section. The overhang or nosing on the third step from the top has broken off. There are also no handrails to either side of the stairs. There is no natural light to the stairwell, and the pendant lamp fitting on the landing is broken.

LIST OF MATTERS WHICH MAY AFFECT THE: Likelihood of a fall

Q .	1 Which apply and which increase the ris	k?	
a)	Length of the steps	Υ	N
b)	Height of the steps	Y	N
c)	Variation in length/height	Y	N
d)	Length of overlap/nosing	Υ	N
e)	Poor grip on stairs	Υ	N
f)	Gaps in stairs	Υ	N
g)	Number or poor handrails	Υ	N
h)	Number or poor banisters	Υ	N
i)	Too narrow/wide stairs	Υ	N
j)	Staircase too long	Υ	N
k)	Poor lighting - natural and/or artificial	Υ	N
I)	Glare from lighting	Υ	N
m)	Doors opening directly on to stairs	Υ	N
n)	Inadequate landing	Υ	N
o)	Poorly built or broken stairs	Υ	N
p)	Dwelling poorly heated	Υ	N
Sev	verity of injury		
a)	Length of staircase	Υ	N
b)	Fault at bottom or top	Y	N
c)	Steepness	Υ	N
d)	Sharp edges	Υ	N
e)	Hard surfaces at foot of stairs	Υ	N
f)	Poorly built or broken stairs	Υ	N
g)	Dwelling poorly heated	Υ	N

HEALTH AND SAFETY RATING SYSTEM Likelihood of a fall on the stairs

PRE-1920 HOUSE

Q.2	a)	Do you think the conditions here make a fall likely?		
		YES NO		
	b)	Why do you think this?		
	D)	why do you think this?		
	IEC			
INJUR	IEƏ			
Q.3	Q.3 a) If a person aged 60 or over fell on these stairs do you think injuries could be fatal or severe?			
		YES NO		
	b)	Why do you think this?		
	-,			
IMPRO	VE	MENT		
Q.4	a)	Do you think something should be done about these stairs?		
		YES NO		
	b)	Why do you think this?		
Q.5	If Y	es at Q4, what do you suggest should be done		

Fire (Risk)

Vulnerable group Persons aged 60 years or over

Related hazards None



Front elevation



Front and side elevation



Closer view of main windows



Dwelling: 1938, two-storey detached house

DESCRIPTION OF HAZARDS

Means of escape: During the 1950s, the timber-framed casement windows to all elevations were replaced with aluminum-framed, double-glazed units with fixed lights and small top hung opening casements. The main form of heating is an open coal fire with back boiler serving radiators to the ground floor only; portable electric radiant fires and a flueless gas heater supplement this. There is an electric cooker. There are no smoke/heat detectors or alarms.

LIST OF MATTERS WHICH MAY AFFECT THE: Likelihood of a fire

a)	Electric socket provision	Υ	N
b)	Defects/disrepair to sockets	Υ	N
c)	Defects/disrepair to switches	Υ	N
d)	Defects to electrical wiring	Υ	N
e)	Space heating - type	Υ	N
f)	Defects to heating/location	Υ	N
g)	Clothes drying facilities	Υ	N
h)	Fire resistant materials	Υ	N
i)	Smoke resistant materials	Υ	N
j)	No fire stops in openings	Υ	N
k)	Disrepair to building	Υ	N
l)	Badly fitting internal doors	Υ	N
m)	Non-fire doors	Υ	N
n)	Door self-closers	Υ	N
o)	Cooker position and location	Υ	N
p)	Lightning protection	Υ	N
Sev	verity of injury		
a)	Smoke or heat detectors absent	Υ	N
b)	Detectors non-functioning	Υ	N
c)	Furniture can easily catch fire	Υ	N
d)	Fire - fighting equipment - adequate	Υ	N
e)	Safe and usable means of escape?	Υ	N

PRE-1920 HOUSE

HEALTH AND SAFETY RATING SYSTEM Likelihood of a fire

Q.2	a)	Do you think the conditions here make a fire more likely?				
		YES NO				
	b)	Why do you think this?				
INJUF	DIES					
Q.3	a)	If there was a fire do you think a person aged 60 or over would escape easily before being harmed?				
		YES NO				
	b)	Why do you think this?				
IMPR	OVE	MENT				
Q.4	a)	Do you think something should be done about the fire risk?				
		YES NO				
	b)	Why do you think this?				
Q.5	lf \	es at Q4, what do you suggest should be done				

Electrical Hazards

Vulnerable group Persons aged under 5 years

Related hazards Damp and mould growth



Airing cupboard with hot water tank above



Detail



Rear elevation



Switch to immersion heater

Dwelling: 1950s three-bedroom semi-detached

DESCRIPTION OF HAZARDS

Hot water system: In winter, hot water is supplied by a gas-fired back boiler, but the early, foam-insulated hot water cylinder also has an electric immersion heater which is used in summer. The seal around the hole where the immersion heater enters the cylinder has perished resulting in a small but continuous leak. Water is not only running down the loose electric lead to the heater, but also onto the timber shelf holding the cylinder and down the side wall of the airing cupboard on which the switch to the immersion heater is located. The plaster skim and plasterboard above and behind the switch box is now thoroughly soaked. The householder has placed a bowl to catch any directly dripping water.

LIST OF MATTERS WHICH MAY AFFECT THE: Likelihood and injuries

Q.1 Which apply and which increase the risks?				
a)	Fails to meet modern standards	Υ	N	
b)	Not enough or poorly sited sockets	Υ	N	
c)	Fuses in the wrong place	Υ	N	
d)	Meters in the wrong place	Υ	N	
e)	Not earthed or badly earthed	Υ	N	

HEALTH AND SAFETY RATING SYSTEM Likelihood of an electrical accident

1946-1979 HOUSE

Q.2 a) Do you think the conditions here make an accident more			
		YES NO	
	h)	Why do you think this?	
	D)	Willy do you timik this:	
INJUR	IES		
Q.3	a)	If a child has an accident in this house as a result of the deficiency shown over page would it be fatal or severe?	
		YES NO	
	b)	Why do you think this?	
	,		
IMPRO	VE	WENT	
Q.4	a)	Do you think something should be done about the deficiency?	
		YES NO	
	b)	Why do you think this?	
	D)	Wily do you tillik tills:	
Q.5	If Y	es at Q4, what do you suggest should be done?	

Hot Surfaces

Vulnerable group Persons aged under 5 years

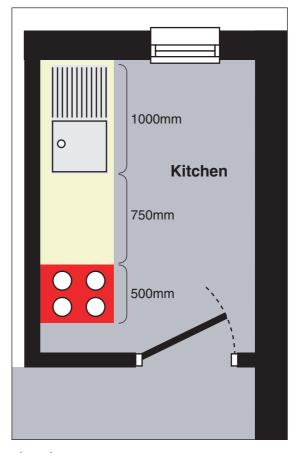
Related hazards Food safety



Cooker behind door



Front elevation



Floor layout

Dwelling: Pre-1920 semi-detached house

DESCRIPTION OF HAZARDS

Narrow kitchen: The small kitchen is 2.5m long by 1.5m wide. Arranged at either end of one of the longer walls is a $1000 \times 500mm$, single drainer sink above a sink unit, with a drawer and cupboards below, and a $500 \times 500mm$ freestanding gas cooker. A worktop, which is inadequate in terms of its area, construction and cleanability, is provided by a crude $750 \times 500mm$ sheet of chipboard spanning between the sink and cooker. The kitchen door opens directly in front of the cooker. The kitchen has a slippery vinyl floor which is worn in places.

LIST OF MATTERS WHICH MAY AFFECT THE:

Likelihood of scald or burn accident

Q.	Q.1 Which apply and which increase the risk?				
a)	Unprotected hot surfaces	Υ	N		
b)	Unguarded open flames	Υ	N		
c)	Hot water temperature	Υ	N		
d)	Thermostatic taps	Υ	N		
e)	Cooker/worktop adjacent to thoroughfare	Υ	N		
f)	Inadequate space	Υ	N		

PRE-1920 HOUSE

HEALTH AND SAFETY RATING SYSTEM Likelihood of a burn or scald

a)	Do you think the conditions here make a burn or scald more likely?				
	YES NO				
b)	Why do you think this?				
IES					
a)	If a child has an accident in this kitchen do you think the injuries could be fatal or severe?				
	YES NO				
b)	Why do you think this?				
OVE	MENT				
a)	Do you think something should be done about the deficiency?				
	YES NO				
b)	Why do you think this?				
If Y	es at Q4, what do you suggest should be done?				
	b) IES a) b)				

ISBN 978185112856-3

ISBN 1-851128-56-5

9 781851 128563

Price: £12.00

ISBN-10: 185 112 8565 ISBN-13: 978 185 112 8563