



Chartered
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Health



Good Housing Leads To Good Health

A toolkit for environmental health practitioners

September 2008

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Acknowledgements

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The toolkit provides the methodology and case studies to help environmental health practitioners indicate the links between private sector housing and public health.

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Steering group members

Dr Stephen Battersby
Consultant, CIEH President

John Bryson
Consultant, CIEH Trustee

Andrea Buse
Southampton City Council

Andrew Griffiths
CIEH Acting Director of Policy

Robin Kennedy
Dover District Council

Viv Mason
Building Research Establishment

Paul Mishkin
London Borough of Islington

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1.0 Introduction

The number of people living in Decent Homes has been recognised as being not just of benefit to the occupiers but also to the wider community and to society

The Building Research Establishment (BRE) Housing Centre was commissioned by the Chartered Institute of Environmental Health (CIEH) to produce a toolkit to help CIEH members and housing managers to promote the role of private sector housing and its wider contribution to public health.

The toolkit provides methodology and case studies to help indicate the links between private sector housing and public health at a local level.

Research has been carried out to establish links between housing and public health at a local level. This involved:

- Researching web-based information
- Using in-house data where available
- Contacting local authorities to find evidence of best practice and examples of local links between public health and housing
- Examining the use of local evidence within the Housing Health and Safety Rating System (HHSRS)
- Researching local health impact projects based around housing
- Carrying out interviews with third parties
- Reproducing relevant case studies
- Producing a sample tool designed to collect local data

The resulting package provides evidence of current good practice and details of how to gather information locally to influence strategy and Local Area Agreements (LAAs). The project has been undertaken with guidance from a steering group.

1.1 Why is a toolkit necessary?

The first few years of the 21st century has seen a plethora of information, targets and new legislation concerning private sector housing. Much of it is aimed at encouraging local authorities to meet the Government's targets and aspirations.

The number of people living in Decent Homes has been recognised as being not just of benefit to the occupiers but also to the wider community and to society.

Homes play the most important role in providing occupiers with opportunities and contribute to the World Health Organization's (WHO) definition of health as: "a complete state of physical, mental and social well being".

There have been a number of studies specifically linking health and housing, together with the costs generated by poor housing. A summary of some of these is included by way of background information in Appendix 1.

The Government has allocated additional funds to Primary Care Trusts (PCTs) to promote public health, much of which has recently been shown to have been used within other health budgets¹.

Cross discipline targets have been introduced by the Government which require partnership working, such as Local Area Agreements (LAAs). These agreements provide private sector housing sections a unique chance to grasp the opportunity to show elected councillors and partner organisations how private sector housing can make a real difference to public health.

The CIEH *Commission on Housing Renewal and Public Health*² recommends that government should consider housing renewal as a public health intervention as a specific theme for future Beacon Council awards.

The aim of this toolkit is to show how links between homes and health can be made and showing, where possible, the cost benefit of some specifically linked housing and health issues. Providing evidence of cost benefit is important where resources

¹ Report of Association of Directors of Public Health, October 2007

² *Commission on Housing Renewal and Public Health: Final Report*, CIEH 2007

for improvement or enforcement action are lacking. Cost benefit is a complex issue and additional information discussing this is provided in Appendix 2.

Local authorities are being charged with drawing up LAAs. The information gained by using this methodology can be linked with wider local priorities, maximising the impact of improved private sector housing.

Reducing health inequalities is a key target for government and councils. The existing links to Local Strategic Partnerships (LSPs), Audit Commission Key Lines of Enquiry (KLOE) and Best Value Indicators (BVIs) is provided in Appendix 3.

Private sector housing is in danger of being lost in the Government's new agenda of social housing and new build. 85 percent of dwellings are in the private sector and there is an important role of advocacy for this sector within a local authorities' strategy.

The Housing Regulatory Reform (Housing Assistance England and Wales) Order 2002, commonly called the RRO, introduced a new concept in dealing with private sector housing.

The legislation and associated guidance (Housing Renewal Guidance 6/2002) gave local authorities freedom to draw up their own policies.

In many councils this has reduced the level of action in the private sector. Officers need to work harder to bring increased resources into the sector to push private sector housing back up the agenda and reduce the widening gap between social and private sector housing.

1.2 Using this toolkit

This evidence based toolkit utilises Health Impact Assessments (HIAs) to show the impact of housing intervention measures on wider health benefits.

What is required is a method of measuring and showing the value of private sector housing intervention to health, society and quality of life. This same method can also be used to show the effect of not intervening (for example the loss of independent living).

The evidence is there and this toolkit aims to help you find it. Firstly find a baseline, and work out the most effective and cost efficient methods of improving homes to sell the approach as Local Area Agreement (LAA) targets. This kit is only a starting point.

Step 1: Use the Housing Health and Safety Rating System (HHSRS) Costs Calculator available to download from the CIEH website www.cieh.org/library/Knowledge/Housing/HHSRS_cost_calculator.xls

This will provide a baseline of likely numbers of incidences within local authority areas, together with the health costs and cost of mitigating the hazard.

This figure can be used as evidence of the cost and subsequently compared to the cost of improvement works.

Local statistics from census data and web-based statistics can be transposed to show a cost benefit or to compare it with the expected national average.

Step 2: Additional information

Use the web links on page 19 to provide additional information at local authority or regional level. In many cases information is provided in graph or chart format and can

be easily copied into reports. The health profile is particularly useful.

Step 3: Carry out a Health Impact Assessment (HIA)

HIAs are particularly valuable in bringing together professionals from different disciplines and will increasingly need to include community safety officers or similar. These can be used to measure the effect, or likely effect, of enforcement action, proactive policy or proposed policy changes.

Using questionnaires are a useful start in health impact assessment. A list of possible questions is included on page 18.

A number of examples of HIAs are included as case studies, starting on page 20. Working with a Primary Care Trust (PCT) is preferable to ensure easy access to vulnerable households.

Voluntary organisations, such as Age Concern or home improvement agencies can be enlisted to help. Data can also be downloaded from Regional Health Observatories.

Step 4: Involve elected members

Elected members will have excellent local knowledge of their wards and may also sit as board members on other organisations, for example the PCT or Age Concern.

Step 5: Local priorities

Link the information and key issues to LAA targets. Planned proactive work, such as additional licensing planned to deal with overcrowding, grants to target bed blocking or working with other agencies on area enforcement, should all link with other agencies priorities.

Step 6: Documented evidence

Publicity, photographs and videos of success help to show the importance of improved homes. Projects to demonstrate this can have an important impact, especially on disassociated audiences³, bringing the issue of health inequalities to an audience who may not be listening.

Step 7: Keeping ahead

New targets and Departmental Strategic Objectives (DSOs) have now been announced by the Government. Further guidance is expected when these objectives have bedded in and good practice can be copied. It will be necessary to think holistically to show other partners the true impact of housing interventions. Good practice is often publicised. Review annually. Once the initial picture and figures have been built up the process will become easier.

³ Measuring Impact: Improving the health and wellbeing of people in mid-life and beyond, National Institute Health and Clinical Excellence 2005

2.0 Wider health determinants

The importance of an increase in Decent Homes is linked to improved communities, reducing crime, improving employment opportunities and educational achievement

Quantifiable evidence of the health benefits associated with improved housing are difficult to show, however the importance of an increase in Decent Homes is linked to improved communities, reducing crime, improving employment opportunities and educational achievement⁴.

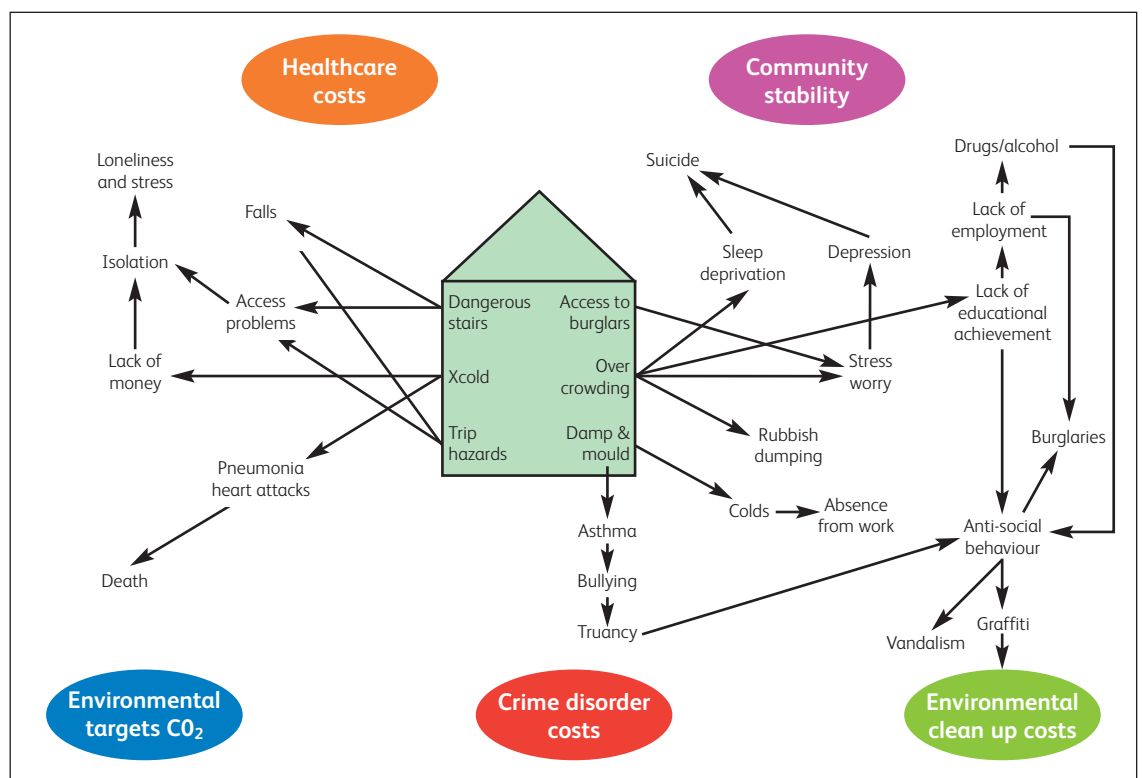
These links can also be expanded to cover anti-social behaviour and vandalism. Furthermore, stress is an health issue within many of the hazard profiles and is linked to bullying, truancy, under performance at school, unemployment or absence at work, etc. Many of these issues bring with them costs of their own.

We also need to ask how much is the cost involved for example in moving an item of dumped furniture or removing graffiti?

Evidence from Neighbourhood Renewal Assessments (NRA) over a number of years show these issues, usually included as part of the environmental assessment, are important to householders.

Health Impact Assessments can provide a structured approach to this.

Table 1 The links between public health and housing



3.0 The mechanisms

Health impact can be used to help assess the effects of improving homes (or not improving them) and to measure in a definable way the health determinants

3.1 Health Impact Assessment (HIA)

Health impact can be used to help assess the effects of improving homes (or not improving them) and to measure in a definable way the health determinants.

The assessment looks at health determinants as a wider contribution to quality of life and society rather than just health costs. A Health Impact Assessment [HIA] is “a combination of procedures, methods and tools by which a policy, program or project may be judged as to its potential effects on the health of a population and the distribution of those effects within the population”⁵.

At the local level an HIA has a potential contribution to make to many areas of activity and can provide a valuable tool to support the work of Local Strategic Partnerships (LSP) to demonstrate and⁶ to support evidence based decision-making;

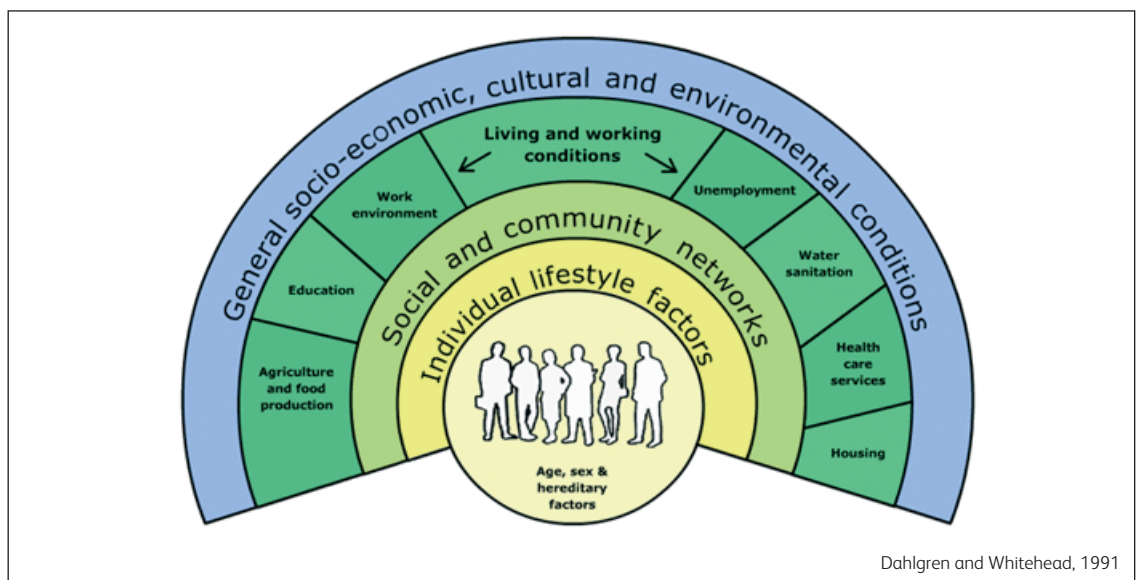
contributing to improvements and reductions in health inequalities.

HIAs contribute to ensuring ownership of a policy, cross-departmental working and partnership development by involving the community and professionals. Within local authorities HIAs can be used to determine the health impact of private sector housing policy, bringing it into the main stream or what could be part of a Local Area Agreement (LAAs). They can be particularly effective in linking enforcement activity with health. The diagram below⁷ depicts the WHO definition of health and is included as it is used as the basis for HIAs.

3.2 Local Area Agreements (LAAs)

Local Area Agreements (LAAs) took the place of Best Value Indicators (BVIs) from April 2008.

Table 2 Health determinants: Key areas influencing health



⁵ WHO European Centre for Health Policy, Gothenburg Consensus 1999

⁶ Mason V, A Holistic Approach to Housing, *Environmental Health Journal*, November 2003

⁷ Scott-Samuel A, Birley M and Arden K, The Merseyside Guidelines for Health Impact Assessment, Liverpool: Merseyside Health Impact Assessment Steering Group 1998

Local authorities as the lead partner have been asked to draw up LAAs in consultation with statutory and non-statutory organisations operating within their area.

LAAs were introduced by the Department of Communities and Local Government (DCLG) in the *Strong and prosperous communities* White Paper. The Government has developed a set of 198 national indicators from which the authority will be able to select up to 35 negotiated targets, reflecting the most important needs of the local community.

The priorities have to be negotiated with the government office for the region and targets set. There is an additional set of 18 statutory targets. The aims of the agreements are divided into four parts:

- Children and young people
- Safer and stronger communities
- Healthier communities and older people
- Economic development and enterprise

Many councils are already involved in preparing LAAs⁸. All councils were required to have these in place by March 2008 to start work on 1 June 2008.

The aim of the agreements is to link key targets. Private sector housing generally has links to many areas through the known wider influence of Decent Homes. The problem within private sector housing is to accurately show this link.

Community and Environmental Health Manager at Daventry District Council Mike Arnold said:

“If services are not recognised as contributing to LAA targets then they will have a lower priority and this may affect funding”⁹.

During future comprehensive area assessments (replacing comprehensive performance assessments) judgements will be made on outcomes and funds will follow. Evidence will be required to show the importance of housing as opposed to other services competing for funds.

As a comparison the table below provides evidence of the numbers of home accidents against those caused at work or on the roads¹⁰. The importance of housing message needs to be brought to the attention of those allocating resources.

Table 3 Comparison between causes of deaths and injuries in United Kingdom and France

Per year	United Kingdom		France	
	Killed persons	Injured persons	Killed persons	Injured persons
At work	380	1,500,000	700	1,150,000
On the road	3600	317,000	7600	170,000
In the home	4100	2,700,000	9000	3,000,000

⁸ Office of the Deputy Prime Minister, The Reward Element of Local Area Agreements: Negotiation of Stretched Targets, November 2005

⁹ Mike Arnold, Community and Environmental Health Manager at Daventry DC, A Voice for Local People Public Health LAAs, *Environmental Health Practitioner*, September 2007, vol. 115/09

¹⁰ WHO Europe 2005

Recent guidance for DCLG has indicated that resources available to make more homes decent will be favoured in local partnerships.^{11 12}

New Local Area Agreements (LAAs) will help to embed housing at the heart of the area's priorities. They will also provide further leverage over local authorities' housing delivery and renewed focus on areas of particular importance.

Appendix 3 gives details of where and how private sector homes fit into the Audit Commission Key lines of Enquiry (KLOE).

The Audit Commission have been charged with introducing the Comprehensive Area Assessment (CAA)¹³, to take the place of the Comprehensive Performance Assessment (CPA). This is intended to be risk based and will focus on the LAA targets.

The CAA framework is still emerging but the risk based approach will concentrate on how policy and practice affects the neighbourhood and community. CAA risk assessments will focus on outputs.

An example where private sector housing may be unexpectedly involved would be the arrival of a food production factory and its links with an increased migrant population requiring housing in the area. 'Sector self-support' (or anticipating and finding resources to deal with new community issues) is expected to be a continuing theme, emphasised with the enactment of the Housing Act 2004. The enforcement procedures are encouraged to be self-supporting, by charging owners/landlords for notices and HMO licenses.

3.3 Departmental Strategic Objectives (DSOs)

New National Indicators (NI) and Departmental Strategic Objectives (DSOs) have been announced. LAAs will have to select the most appropriate NIs for their area.

Future targets are likely to require some form of measurement set by the LAA from a baseline¹⁴. The Audit Commission has said that they intend to concentrate on measuring outcome as opposed to local authority delivery. Their intention is not to be bound by the targets set by the LAA.

But with the move to outcome based DSOs and NIs, within homes there will be a greater place for data based on specific HHSRS hazards. Below are a few examples relating hazards with national indicators (NI) and outcome based Departmental Strategic objectives (DSO) or Public Service Agreements (PSA), which are not directly related to measuring conditions in a home.

PSA 12: Improve the health and wellbeing of children and young people

NI 50: Emotional health of children

Cause: Crowding and space hazard

PSA 17: Tackle poverty and promote greater independence and wellbeing in later life

NI 138: Satisfaction of people over 65 with both home and neighbour

Cause: Entry by intruders

¹¹ www.dh.gov.uk/PublicationsAndStatistics/FreedomOfInformation/ClassesOfInformation/WhitePaperHealthCareCommunity/fs/en
Available here:
www.socialinclusionunit.gov.uk/downloaddoc.asp?id=797

¹² PSA Delivery Agreement 20: Increase long term housing supply and affordability, HM Government, October 2007

¹³ Strong and Prosperous Communities – the Local Government White Paper, Cm 6939-I, Department of Communities and Local Government, October 2006

¹⁴ Negotiating New Local Area Agreement, Department for Communities and Local Government, September 2007

The work carried out by handyperson schemes can help local authorities to reach vulnerable clients much faster

Defra DSO: climate change tackled internationally and through domestic action to reduce greenhouse gas emissions

NI 187: Tackling fuel poverty. People receiving income based benefits living in homes with a low energy efficiency rating

Cause: Extreme cold hazard

The Government is committed to introducing a 'place survey'¹⁵ which will measure satisfaction with accommodation and neighbourhood. A self perception health and wellbeing questionnaire will be included as part of this. Health prevention has visibly been moved up the agenda.

3.4 Home Improvement Agencies and handyperson schemes

Reducing delays in discharge from hospital is a key health sector priority¹⁶.

A fee system was introduced whereby hospitals can charge social services departments for failing to make arrangements for the care of older people who no longer have a medical need to remain in hospital.

This change was also accompanied by short term grant aid to support initiatives which facilitate hospital discharge. These are usually carried out by handyperson services facilitated by a Home Improvement Agency (HIA).

These agencies often receive additional funding from local authority strategic housing budgets and in some cases are run in-house by the private sector housing team. The links to Department of Health (DH) objectives should be considered within LAAs.

The report *On the Mend: The Role of Home Improvement Agencies in Hospital Discharge* (Adams, 2001) demonstrated how undertaking small repairs and minor adaptations to the home of people waiting to leave hospital can be critical to their discharge.

The provision of a small amount of funding can support the services of a handyperson scheme based within a Home Improvement Agency¹⁷. Client confidence in these services is evident and in many cases these services are over subscribed.

The work carried out by handyperson schemes can help local authorities to reach vulnerable clients much faster. These schemes can also assist health service providers to reduce hospital admissions of older people having accidents. Carrying out minor repairs prevents hospital admission from falls and accidents in the home.

The cost of delayed discharge from hospital can be estimated at approximately £160m per annum across England, according to the DH in (2005).

¹⁵ The New Place Survey Consultation, Department for Communities and Local Government, December 2007

¹⁶ Care & Repair England, The Renewal Trust Business Centre, 3 Hawksworth Street, Nottingham NG3 2EG
Email: info@careandrepair-england.org.uk
Web: www.careandrepair-england.org.uk

¹⁷ DCLG, Supporting People Foundations, Bleaklow House, Howard Town Mill, Glossop SK13 8HT

4.0 Quantitative methodology to show health impact

In this country the average likelihood of a fire hazard for example occurring between 1997 and 1999 was one in 4,760

The Health and Safety Executive has developed a method for businesses to calculate the cost of accidents in their work place¹⁸. This calculator has been redeveloped and based on the HHSRS to measure the effect of the home on health and produces a method of quantifying the expected number of health hazards in dwellings. The estimated figure can then be compared with local data to show the quantitative effects of appropriate intervention.

The key indicators of health are used and choosing the key indicators to quantify the impact of improving housing on health depends on two factors:

- Which factors have the greatest impact of health?
- What measurements are available and their accuracy?

Deciding on the hazards affecting health is comparatively easy with the introduction of the HHSRS and the data now available. But it is worth looking at wider evidence available from the World Health Organization. The following table is produced from their literature (ref 28)¹⁹.

Table 4 The most significant housing hazards associated with health effects*

- Poor air quality (particles and fibres that can cause death among the very ill)
- Poor hygrothermal conditions (excess heat, cold or humidity)
- Radon
- Slips, trips and falls
- Noise
- House dust mites
- Ambient tobacco smoke
- Fires

Hazards believed to have the most significant adverse health effects are ranked as below, for countries that enforce health and safety or building regulations.

The benefits of removing these hazards are directly linked with mental and physical health.

In most of England and Wales Radon is not a significant issue and is therefore not included as a key indicator.

Air quality in the United Kingdom is controlled by legislation other than that concerned with housing with the exception of that associated with mould spores and humidity, which is dealt with under damp and is therefore disregarded.

Using the HHSRS an indication of the frequency or likelihood can be calculated. In this country the average likelihood of a fire hazard for example occurring between 1997 and 1999 was one in 4,760.

The small incidence of a fire hazard makes predictions more difficult. For this reason it is suggested that fire is only included as a local indicator where accurate figures are available.

¹⁸ www.hse.gov.uk/costs/accidentcost_calc/accident_costs

¹⁹ www.euro.who.int/HEN/syntheses/housinghealth/20050215_3

*The seriousness of the hazards has been ranked according to the number of people affected, the seriousness of the effects and the strength of evidence.

One of the hazards that is frequently a cause of concern in England and Wales is entry by intruders, with an average likelihood of one in 40.

The other hazard with far reaching consequences is crowding and space. Although the average likelihood of the hazard occurring is only one in 8,000 there are indications that it is increasingly common, particularly in the south of the country and within areas with a high migrant workforce.

The key indicators are therefore:

- Damp
- Cold
- Falls
- Entry by intruders
- Crowding and space

Additional local indicators may include:

- Radon
- Fire

5.0 Using the Housing Health and Safety Rating System (HHSRS)

The HHSRS has been developed to identify and evaluate the potential risks to health and safety from deficiencies identified in dwellings

The HHSRS has been developed to identify and evaluate the potential risks to health and safety from deficiencies identified in dwellings.

The system was developed by Warwick University Law School²⁰ using statistical evidence²¹ to give an accurate basis for calculating the likelihood of a hazard causing harm and the range of harms that maybe expected.

There are 29 hazards identified but many of them are comparatively rare for example explosion or lead poisoning. The more common hazards are seen regularly by environmental health practitioners working in private sector housing. It is the more common hazards used in association with the key indicators that are used to develop a quantification methodology.

These are:

- Damp and mould growth
- Excess cold
- Crowding and space
- Entry by intruders
- Falling on level surfaces etc
- Falling on stairs etc
- Fire

The method for surveying a dwelling and accurately assessing a hazard is the same whatever the hazard. This methodology is given in the published guidance²² which must be followed. A brief summary for non-technical persons (using as an example the hazard of damp and mould growth) is given in Table 5.

Assessing a dwelling for a damp and mould hazard

A full survey of the dwelling is carried out taking note of the structure of the building and its ability to prevent damp entering through the roof, windows, walls and floor.

The waste services will be examined to ensure nothing is likely to leak. The type of heating, insulation and ventilation will be noted to see whether condensation is likely to occur. The assessment is then made as to whether any damp and mould growth is likely to cause an occupier or visitor to experience any harm over a 12 month period.

The occupier assessed (as required by the guidance) is the most vulnerable for that particular hazard. In the case of damp and mould the occupier assessed is an under 14 year-old as they are the group judged most susceptible to asthma.

If the surveyor considers there is a significant risk from the hazard then this will be assessed taking into account the average likelihood of a harm occurring. The average likelihood is given in the HHSRS Operating Guidance²³.

The average likelihood of an under 14 year-old person suffering a health problem from damp and mould in any type of dwelling is given as one in 464. A health problem or harm is defined as one which requires some type of medical intervention. The type of harm that could occur from damp may range from a common cold, stress or asthma. These health effects or harm outcomes are presented by percentage as one of four classes of seriousness. See Table 5. The definitions of these are all given in the guidance and produced from the statistical evidence basis mentioned above.

Predicting the number of hazards within a local authority

The figures in the following two tables can be used to give the likely number and type of cases within an authority area.

The calculation tool can be extrapolated to include the costs associated with expected harm outcomes. Costs are substituted for the harm outcome weightings given in the

²⁰ Housing Health and Safety Rating System Guidance (Version 2), Safe and Healthy Housing Research Unit, Warwick Law School, Office of the Deputy Prime Minister, November 2004

²¹ Statistical Evidence to Support the Housing Health and Safety Rating System: Volume II – Summary of Results, Office of the Deputy Prime Minister, May 2003

²² Housing Health and Safety Rating System: Operating Guidance, Office of the Deputy Prime Minister, February 2006

²³ Housing Health and Safety Rating System: Operating Guidance, Office of the Deputy Prime Minister, February 2006

guidance. An example using damp and mould growth is below:

Table 5 Damp and mould, an example

In a local authority area with 100,000 private sector dwellings. The average likelihood of damp causing an harm is 1 in 464.

$100,000 / 464 = 216$ expected incidences

Harms expected following this incidence are separated into the classes of harm given in the guidance, calculated into the representative scale percentage points and costed.

This equals:

0% x 216 = 0 class 1 x £50,000
1% x 216 = 1.08 class 2 x £20,000
10% x 216 = 10.8 class 3 x £1,500
89% x 216 = 96 class 4 x £100

Total expected health costs due to damp and mould in private sector housing in a local authority with 100,000 such dwellings is £47,000.

This methodology makes a number of far reaching assumptions and can only be used as a guide, but the calculator is a useful starting point to give the average expected incidents and costs when available. Similar calculations can be used for all hazards.

This expected number can, where the information is available, be correlated with the actual expected number of incidents and harms. The figure can be adjusted for household size and number of vulnerable persons if this is significantly different from the average. An estimated cost can be given which can be compared to local authority costs for preventative works.

Similarly, a comparison between the local area and the national picture can be made. Information from house condition surveys,

statistics from police, fire and accident sites, health authorities and census data can be substituted where available to show the greatest hazards within a local authority or ward area.

A list of useful websites is provided on page 19. The regional public health observatory is particularly valuable. Councils are required to have a community crime prevention officer who will have local crime data available. County Council websites give statistics at ward level. This should provide evidence of the areas of greatest concern and a cost benefit.

The HHSRS guidance indicates where statistics providing average likelihoods and harm outcomes have been collected from. Using this information allows similar local statistics to be used to indicate likelihood.

The example on page 16 compares Suffolk Coastal District Council, Ipswich Borough Council and Nottingham City Council for the hazard of entry by intruders. The basis of estimates for entry by intruders is based on all burglaries as there is an assumption of some mental harm done.

Local statistics are available for fire and numbers of bed spaces (crowding and space). Health based statistics are also available but the number of variables currently makes their use more difficult.

Table 6 Entry by intruders, an example

Suffolk Police Authority is required to report statistics to the county council. Looking at their website gives a break down of burglaries for every ward in Suffolk. Similarly, the burglary numbers and numbers of dwellings for Nottingham City Council were obtained from their website.

Suffolk Coastal District Council has 49,200 private sector dwellings. Number of burglaries in 2005 was 172.

Likelihood is $49,200/172 = 1$ in 286

Ipswich Borough Council has 44,564 private sector dwellings. Number of burglaries in 2005 was 433.

Likelihood is $44,564/433 = 1$ in 102

Nottingham City Council has 83,600 private sector dwellings. Number of burglaries in 2005 was 54.8 per 1000.

Likelihood is $83,600/4581 = 1$ in 18

Notes:

National average Likelihood is 1 in 40

The burglaries measured include those in social housing. Suffolk has one of the lowest rates of burglary in the country.

6.0 Cost comparison

Comparisons between the local cost of preventative works and those of ill health will be one of the main uses of the HHSRS Costs Calculator

Comparisons between the local cost of preventative works and those of ill health will be one of the main uses of the HHSRS Costs Calculator.

Cost assumptions included in the Costs Calculator have been developed from median estimated costs used by the English Housing Condition Survey (EHCS) and are a useful starting point. Actual works and their costs can be developed locally where more accurate information is available.

The table below shows these figures.

6.1 Other costs

This toolkit concentrates on the cost benefit in health cost terms. The full costs are complex and are discussed in more detail in Appendix 2, however some use can be made of other costs where available. A burglary for example has been costed at £3,268²⁴.

6.2 Summarising hazards, health and cost

The cost of typical class 1, 2, 3 and 4 harm outcomes has been calculated and this can be compared with the costs of works. The national average costs calculated can only be a starting point. As more information becomes available it will be possible to use local statistics and local costs to more accurately inform strategy.

Table 7 Demonstrating costs of mitigating hazards: Costs of remedial works

Hazard	Costs to remedy	Notes
Crowding and space	£16,523	
Damp	£11,075	Cat 1 costs only
Entry by intruders	£1,046	Estimated from working results
Excess cold	£4,993	
Level falls	£385	2006 data only
Stair falls	£338	2006 data only

Please note: Costs have been calculated from medians using the 2005/06 EHCS data.

²⁴ Dubourg R and Hamed J, The Economic and Social Costs of Crime Against Individuals and Households 2003/04, Home Office Online Report 30/05, Home Office: London 2005

7.0 Health Impact Assessment – Questionnaires

Different types of questionnaire are already sent out by most local authorities asking questions regarding customer service

To prevent 'consultation fatigue' a selection of questions successfully used before is suggested below which can be added to existing questionnaires.

The questionnaire should not be too long, so the most appropriate questions should be selected:

1. How do you feel about the state of repair of the internal/external structure of your property? (range replies from very good to very poor)
 2. How much do you spend on heating your home?
 3. Do you feel safe within your home? (range from very safe to dangerous)
 4. Have you had any accidents within the home during the last 12 months?
If so did the accident require first aid/GP visit/hospital visit?
 5. Approximately how many times has a member of your household visited their GP in the last 12 months?
 6. In your opinion what problems related to accommodation and neighbourhood do people face?
 7. In your opinion what physical and mental health problems are people living with?
 8. How have these problems arisen?
 9. What difficulties do you or your neighbours encounter with their daily activities as a result of their physical/mental health?
 10. Do you have any problems accessing services i.e. bus/library/GP/shop?
 11. What are the reasons for this?
- To assess the impact of improvement work**
12. Since the work was carried out do you feel? (range from happier to content to the same)
 13. Since the work was carried out do you feel more able to ask friends to visit? (range from a lot to no difference)
 14. Since the work was carried out do you think your children's health has improved? (range from a lot to no difference)
 15. Since the work was carried out has your health/the health of other occupants in the property improved? (range from a lot to no difference)

8.0 Useful websites

Every local authority area has a health profile. Google the council name and “health profile”, for example: “Suffolk Coastal health profile”.

Every region has a public health observatory containing information on the number of illness/accidents in that region, for example the Eastern Region Public Health Observatory ERPHO.

www.neighbourhoodstatistics.gov.uk

This site provides statistics on benefit levels/crime, etc for each ward within each local authority.

www.hpi.org.uk

The health poverty index is downloadable in graph or spreadsheet format for every local authority area.

www.Hi4em.org.uk

Housing Intelligence is an East Midlands orientated site, providing information on dwelling statistics for local authorities in the region.

www.integratedcarenetwork.gov.uk/housing

Is an easy to find information site connecting housing to the health and social care agenda.

TIP: Mark useful websites and pages to help find them again.

9.0 Case studies – Measuring health impact to show the qualitative effects of intervention

There are eleven case studies précised and included here to show some best practice around the country. Health impact can be measured before, during or after an intervention or proposal.

9.1 Health@Home: Warrington Borough Council²⁵

For further information please contact Gerry Kiddle at Warrington Borough Council on: 01925 246812

Key points:

- Partnership working
- Training of agencies in the work and tools of partners working with similar client groups
- Health questionnaires following housing intervention

The Health@Home Project (2004-2007) is a partnership initiative focusing on the links across sectors, with health and wellbeing as their core concern.

The aim of the project was to focus on links across boundaries of services, to assist individuals, to assist staff to identify and refer on ill and vulnerable people, provide information and training to improve the coordination of health and housing sectors and aid the development of best practice.

Health@Home aims to cut across the normal boundaries of service provision in a practical way and to improve pathways between services.

The cases referred to Health@Home had the following health issues:

- Asthma/respiratory/Coronary Obstructive Pulmonary Disorder (COPD): 25
- Heart condition: 1
- Several health conditions: 4
- Other (mental health, blind, arthritis): 12

Actions taken to improve health included energy efficiency advice, grants, repairs and adaptations.

Warrington also has high rates of respiratory illness. A study²⁶ has shown that by funding central heating measures in damp homes where there are asthmatic children school days lost due to asthma reduce from nine school days per 100 to only two days per 100.

A Health Impact Assessment was conducted after work had been carried out. Most people asked said that they very much appreciated the work that was done and felt that it had greatly improved the quality of life for the family or had improved their health.

However, the 19 percent of people who said that the work had not improved their health did so because they were healthy anyway or their condition is chronic and could not be improved by improvements to the condition of the home alone.

When asked “has your health improved as a result of the works to your home?” the results were as follows:

- Yes: 38 or 67 percent
- No: 11 or 19 percent
- No answer: eight or 14 percent

The survey shows that work to improve the quality of private sector housing plays an important role in improving the health and wellbeing of occupants.

This fits in very well with the aims of the Social Inclusion Strategy, which seeks to improve the living conditions, health and wellbeing of disadvantaged groups.

When asked “how much has your health improved, on a scale of zero to five, as a result of the works to your home?” the results were as follows:

- 5: (a lot) 20 or 45 percent
- 4: 14 or 32 percent
- 3: 4 or 9 percent
- 2: 2 or 4 percent
- 1: 3 or 7 percent
- 0: (not at all) 1 or 2 percent

Three quarters of respondents said that the work has significantly improved their health and wellbeing.

²⁵ Health@Home Project Report October 2004 – March 2007, Warrington Borough Council, Warrington Housing Association and Warrington PCT

²⁶ Housing and Health – The Cornwall Intervention Study (a report to the Trustees of eaga Charitable Trust), April 2004

9.2 Safe and Warm Housing Improvement Project²⁷: Merseyside Health Action Zone (HAZ)

Key points:

- Reducing winter deaths and empowering people to stay in their own homes
- Measurements of health attributes using questionnaires
- Results showing a reduced number of visits to GP and reduced length of hospital stays

The project was run using Health Action Zone (HAZ) funding and involved the former Liverpool Health Authority which subsequently became the Primary Care Trust. The evaluation is of particular interest due to the use of standard health research questionnaires reported in eight groupings. The results are shown below.

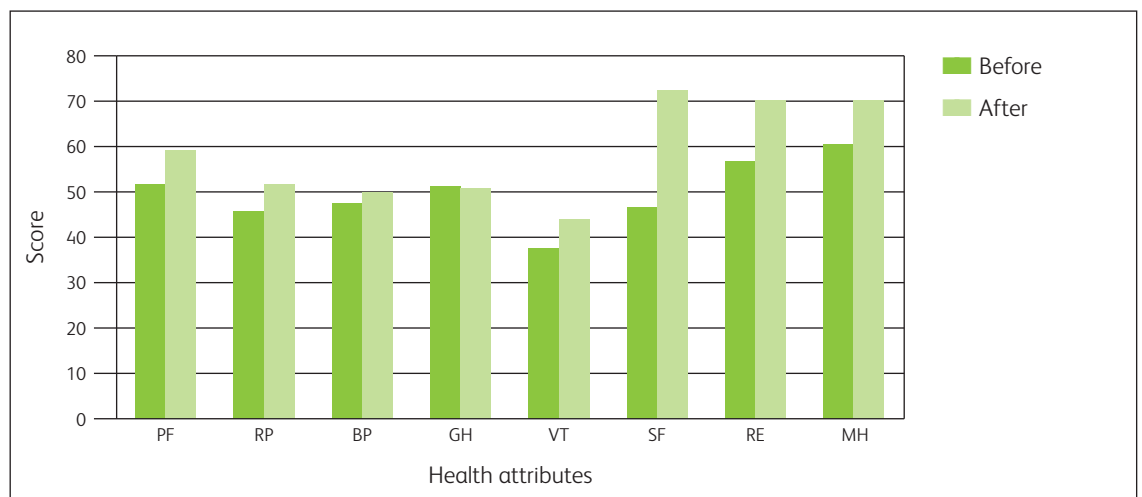
The SF36a questionnaire (a standard health questionnaire used across health sectors) is structured to measure eight health attributes using the Lickert method, ranging from strongly agree to strongly disagree, of summated ratings. The attributes are:

- PF Physical functioning
- RP Role physical
- BP Bodily pain
- GH General health
- VT Vitality
- SF Social functioning
- RE Role emotional
- MH Mental health

A further attribute (HT or reported health transaction) is contained within the general health attribute. Each response in the SF36a questionnaire is scored numerically. In general a higher score indicates better functioning or health, but this is not the case with every attribute – some require recoding in order to avoid bias.

The questionnaire is designed to be completed by the respondent. However, in the circumstances of the Safe and Warm project it was decided that a surveyor should visit respondents in their own homes. The Liverpool HAZ results showed an improvement in seven of the eight attributes as shown below:

Table 8 SF36a Survey results for Liverpool



²⁷ Merseyside Health Action Zone, Safe and Warm Housing Improvement Project, Final Monitoring Report, Prof. Chris Couch and Terry Fitzharris, Liverpool Moores University 2003

The project concluded that it was successful in improving physical housing conditions, particularly in relation to heating and insulation systems, and security in the home. This has led to occupiers feeling warmer at home and experiencing reduced heating costs.

Advice on welfare benefits resulted in increased household incomes in many cases. Collectively these physical and economic improvements have in turn led to health benefits. Particularly noticeable have been:

- Improvements in social functioning
- Reduced demands upon GP services

Not only does the project confirm the view that investment in housing conditions can improve the health and wellbeing of householders, and therefore reduce the burden both on primary health care, but there will also be some reduced burden on hospitals.

An additional result of this project, because of the partnership approach and sharing of professional knowledge, was an increased take up of the appropriate state benefits.

9.3 Health through Warmth: Walsall Council²⁸

For further information please contact Helen Marshall, Health through Warmth Area Partnership Manager on: 01905 501805 or 07989 492922

Key points:

- Funding through an outside agency
- Trains key workers to recognise health issues resulting from poor housing
- Links with LAAs

The Health through Warmth referral scheme is in partnership with electricity provider Npower. The scheme tackles fuel poverty, cold related illness and excess winter deaths. It also aims to improve the health and living conditions of the most vulnerable people in the most deprived areas of Walsall.

The scheme trains key workers to recognise when the clients they are visiting are suffering from ill health as a result of living in a cold/damp home. The trained officer can then refer them to a central point that will identify and implement the appropriate solution. This can include central heating, insulation, energy advice and a benefits health check.

To be assessed for the scheme the client must suffer from a cold or damp related illness. The project operates across the whole of the borough for people of any age. The scheme applies to all tenures, but it is

likely that the majority of the works completed will be in the private sector.

The local Primary Care Trust has already identified more than 100 staff to be trained in completing referrals. The local branch of Age Concern is also supporting the scheme and their staff have received training. The initial success of the project has led to the employment of a Health through Warmth officer.

Evaluation of the scheme has shown Standard Assessment Procedure (SAP) rating comparisons. The average Health through Warmth SAP has gone up from 48 to 73. The PCT have been asked to conduct a cost comparison of savings to the PCT services after an average case has had energy efficiency measures.

Further evaluation shows a direct contribution to nine of the targets identified in the main LAA aims and also shows a contribution to the other three aims, as below.

Links to LAA targets

In the original commission several LAA targets were identified. These are listed below along with successes achieved as at October 2007, which are highlighted in bold:

LAA target number (from appendix)	How will your proposal assist delivery of this target
1	The proposed 23 Health Trainers will receive Health through Warmth training which will result in their client group being referred to the scheme for measures to be installed. 242 delegates have received HTW training, 35 of these being from the local health authority.
2	The scheme targets clients with cold related illnesses, therefore reducing excess winter mortality rates and increasing life expectancy. Based on current monitoring information, it is anticipated by March 2008 that the excess winter mortality rate for Walsall will have been reduced by 18 as an outcome of this project.

²⁸ Health through Warmth Exit Strategy, Housing Services, Walsall Council

LAA target number (from appendix)	How will your proposal assist delivery of this target
3	<p>Cold related illnesses severely affect cardiovascular and respiratory ailments. The provision of a warm home alleviates these ailments and combats cancer, heart disease and strokes.</p> <p>To date 246 people with the illnesses outlined have received energy efficiency measures from the project which will have improved their health condition and wellbeing.</p>
5	<p>Health through Warmth schemes in other areas have been shown to improve patients' mobility, thereby reducing the incidents of falls.</p> <p>To date 228 people, whose health condition could result in reduced mobility leading to risk of falls, have been helped by the project.</p>
9	<p>As the health of clients improves following improvement works it will impact positively on emergency bed days target (the number of days an 'emergency' patient takes up a hospital bed).</p> <p>Work is currently being undertaken by the PCT to assess the budgetary savings brought about by this scheme on local health service delivery.</p>
10	<p>Improving the living environment of vulnerable people promotes independent living and reduces the need for residential care.</p> <p>The current amount of people aged 60 plus who have directly received assistance through the Health through Warmth scheme is 256.</p>
12	<p>Increased levels of health and wellbeing of people in work leads to them taking less time off sick.</p> <p>The Health through Warmth scheme is based on household income rather than benefit take-up (which drives most other grant systems) allowing it to help those who are employed.</p>
14	<p>This scheme will assist in meeting the thermal comfort element of the Decent Homes standard prior to 2010, particularly in the private sector.</p> <p>Because of the works carried out by Health through Warmth 230 properties now exceed the thermal comfort element of the Decent Homes standard. These properties will also have been taken out of fuel poverty.</p>
15/16	<p>Specialist training is available to engage black and ethnic minority (BME) groups.</p>

A study has been commissioned to highlight the best methods of working with BME groups. Community events have been held with various faith organisations across the borough.

The commission also recognised that Health through Warmth had links into the other three pillars. Examples of successes in these pillars are:

- a) **Children and Young People** – of the 314 referrals received into the scheme so far, many will have young people living in the household. 10 referrals, which resulted in works being carried out, were received where the client with the serious illness was a young person
- b) **Safer and Stronger Communities** – Property values rose as a result of the energy efficiency measures installed. The average SAP rating (the method used to measure the energy efficiency rating of a property on the scale of 1 to 100) has risen from 48 to 73, an improvement of 52 percent
- c) **Economic Development and Enterprise** – The scheme primarily uses the services of local contractors, who in turn employ local people

9.4 The impact of housing on health²⁹: Stockport Metropolitan Borough Council

Key points:

- Health data collected
- Health visitor questionnaires
- Recommendations include further joint working

Stockport Metropolitan Borough Council carried out a Health Impact Assessment before formulating their housing strategy:

“To inform the development of Stockport’s 2005/2008 Housing Strategy to ensure it is geared to tackle public health issues in a systematic way.”

Health data was collected on a ward by ward basis on particular conditions which may be influenced by housing. Respiratory illnesses including excess cold deaths and asthma; accident statistics involving accidents in the home; homelessness and mental illness data was collated. Data from the House Condition Survey was used to inform the process.

The HIA included asking health visitors what housing issues affected on their clients. This identified a wide set of factors including affordable housing and neighbourhood issues. The poor condition of the private rented sector was also identified as being a priority.

The recommendations were to prioritise private rented stock, improve links with health visitors for future referencing, incorporate links (such as reducing crime) into the Housing Strategy and to accelerate outcomes by accessing joint funding. The last two points are the basis of the new LAA targets.

²⁹ The Impact of Housing Conditions on Health, Report to Social Care and Health Scrutiny Committee, Stockport Metropolitan Borough Council 2005

9.5 Health Impact Assessment: North West Leicestershire's Private Sector Renewal Strategy³⁰

Key points:

- Identifying excluded groups
- Strengthening the enforcement strategy
- Using a common language across all professional groups

Northwest Leicestershire commissioned a rapid HIA of their draft Private Sector Housing Renewal Policy.

The HIA was used as one of the main methods of consultation. It allowed the bringing together of health professionals and council members as representatives of clients and the wider community.

During the HIA a wide range of health determinants were discussed against a background of statistical information regarding the tenure and property type. Recommendations at the end of the report assessed the policy as having a positive effect on health, particularly towards the target groups, but also highlighted some areas for improvement – allowing the policy to be tightened.

One of the unexpected issues raised during the rapid Health Impact Assessment was the exclusion of private tenants from the policy. Recognition of this allowed the enforcement strategy to be strengthened.

The names of assistance available and language within the draft policy were found to differ from related policies within the public and health sectors. Altering these so that everyone speaks the same language should increase understanding and communication between professionals.

³⁰ Mason V, A Holistic Approach to Housing, *Environmental Health Journal*, November 2003

9.6 Leeds Landlord Accreditation Scheme³¹: Leeds City Council

For further information please contact John D Swift, Health Improvement Specialist, Leeds Primary Care Trust on: 0113 3057551 or Mark Dolman, Principal Health Development Officer on: 0113 2149216

Key point:

- Demonstration of the improved health of private tenants following proactive intervention

A Health Impact Assessment working group was set up to include officers from Leeds City Council and Leeds Primary Care Trust. The assessment documented evidence showing that housing conditions affect health and wellbeing of occupants:

“An examination of the condition of properties owned by Leeds Landlord Accreditation Scheme (LLAS) members and non-members shows that member properties are of a higher standard and their tenants are consequently experiencing better health.

“Recommendations are made with respect to enhancing and extending the scheme, thereby enhancing the health of the population of Leeds and tackling health inequalities.”

The HIA was carried out using two main tools:

1. Property Improvement Plans (PIP) drawn up following HHSRS surveys
2. Questionnaires

Comparisons were made between the condition of LLAS and non-LLAS properties based on HHSRS surveys. A self perception questionnaire was completed by the tenants.

³¹ Health Impact Assessment of the Leeds Landlord Accreditation Scheme, JD Swift & M Dolman, August 2007

9.7 Pimhole Clearance Area³²: Bury Metropolitan Borough Council

Key points:

- Crosscutting recommendations
- Demonstrated the possible negative aspects of housing renewal, as well as the positive, allowing preventive action to be taken before the event

Bury Metropolitan Borough Council (MBC) commissioned a rapid HIA on their proposed clearance area in Pimhole. The assessment day was attended by health professionals, representatives from business and residents. A major benefit was the involvement of professionals from a number of disciplines – leading to crosscutting recommendations.

The predicted health results are listed below:

- An improvement in childhood health through increased garden space leading to increased physical activity. PCT mapping shows 27.8 percent of residents in East Bury take no physical activity in a week, 6.4 percent above the average for Bury
- A reduction in accidents both within the home due to improved design and those due to traffic. Speeding traffic is seen as a serious problem by 26.1 to 29.4 percent of East Bury residents. The average for the number of Bury residents who see speeding traffic as a problem is 22.2 percent
- A reduction in the incidence of asthma by providing increased garden area for play and dryer homes
- Improved self esteem and motivation
- Educational opportunities increased with more room for studying. 2001 census data indicates that 13 percent of families are overcrowded compared with a five percent average for Bury

- An increase in community ownership with subsequent reduction in environmental nuisance and investment in homes
- Improved employment and training opportunities, particularly if a scheme allowing self build homes can be achieved and/or developers are encouraged to use local labour and provide training. Unemployment in the area is 4.2 percent according to census data, the Bury average is 2.7 percent
- Lower running costs of new homes with improved energy efficiency will increase comfort levels and give additional income for leisure pursuits
- A perceived opportunity for some residents to move to a more socially inclusive area, a new start and access to more facilities. 4.2 to 5 percent of East Bury residents would not feel safe out in the neighbourhood during the day. The average for Bury is 2.4 percent
- Increased chances for private rented sector tenants to gain better homes

The predicted negative health impacts:

- Psychological risks associated with a change of community cohesion, separation of extended families
- Less homes available, increasing the length of the waiting list for social housing
- More expensive homes will reduce additional income for other pursuits
- Stress through fear of the unknown
- Potential poorer access to services and employment opportunities for those moving away from the area

³² Bury MBC Pimhole Rapid HIA Report, Hollesley Health & Housing Consultancy, April 2004

- Possible lack of access to appropriate education, social services and medical services
- Loss of employment and business for commercial concerns within the area
- Stress to remaining community
- Reduced employment through potential redundancies at the local school if the numbers of pupils are reduced due to moving out of the area
- Increased asthma and chest disorders due to building and demolition
- Short term increase in vandalism, noise levels and perceived increase in crime levels

Predicting the negative impacts allowed health professionals to work together to reduce these before the event.

9.8 Health Housing Service: Nottingham Energy Partnership

For further information please email: info@nottenergy.com

Key points:

- Use of case studies to advertise achievements
- Links with social exclusion

The case study included below uses a real case as an evaluation tool. The inclusion of photographs can also be used to help secure publicity.

Case Study – Catherine

Catherine, a mother of two young children, lives in Hyson Green in a three bedroom terraced house rented from a private landlord and was having problems keeping her home warm – the fuel bills were very high.

It was at the Sure Start activities group at the Vine Community Centre in Hyson Green that Catherine met Debbie, Nottingham District Council Healthy Housing Project Coordinator and was referred to the Warm Front Grant scheme.

Within a month a surveyor had assessed her eligibility for the scheme and her property to see what measures could be taken.

Catherine was pleased to find that she was eligible to receive a central heating system; this included a new gas combi boiler and five radiators.

She said:

“The Warm Front grant has changed my family’s life. I have lived in my home for six years without any central heating, only a gas fire in the living room. I had to use an electric heater to warm the girls’ bedroom before bedtime, which was very expensive. The girls shared a room as I couldn’t afford to heat a bedroom each for them.

“We have experienced quite a few really bad winters and it has been really hard and

expensive for me to keep the house warm. As a parent my main concern was keeping the girls warm and happy.

“Now everything has changed for the better, the house is warmer and the whole atmosphere in the house has changed.

“We never used to use the dining room as it was far too cold, but now we have central heating in there it’s warm and we can sit round the table to have meals together as a family. The girls have now put up all their paintings and pictures they have done from nursery and home to make the dining room look more homely. They are so much happier; they can run around all the rooms in the home and play in their bedrooms and feel warm.

“I could tell our home is so much warmer when a friend came to visit. This friend never took her coat off in my house as it was just too cold. The other day she came in, took her coat off and told me my house was warm, which made me so happy.

“We just want to say a big thank you to Warm Front, they have changed our lives. I would advise anyone eligible to take up the opportunity and apply for a grant today; it’s fantastic.”

June 2007
Nottingham Energy Partnership

9.9 Broadening Choices for Older People (BCOP): A handyperson service in Birmingham³³

Mrs M is 75 years-old and cares for her husband who, due to multiple strokes, now has severe mobility limitations.

He is also diabetic and suffers with vascular dementia. Mr M has refused all provision of personal care, so Mrs M is left to deal with most of his needs. She has a heart problem, a spine condition and is waiting for hip replacement surgery. Mr M has also had many falls around the home. Home care assistants come to help with tasks such as making the beds and cleaning each day and Mrs M receives three hours respite care per week.

Mr M was a builder and ran his own company for many years. His wife has a lot of trouble getting him to accept people coming into their home to undertake repairs and BCOP (Broadening Choices for Older People) is the first time he has accepted. Commenting on the quality of the BCOP handyperson scheme personnel Mrs M said:

“They had such a friendly way with them and came in not just as a sort of builder. They came and spoke to [Mr M] and took an interest in him and explained what they were going to do and that is why [Mr M] accepted people into the house.”

BCOP has completed many jobs for the couple, from changing light bulbs to installing a shower. Mrs M said that having the service available: “had taken away a great deal of worry”.

³³ Copied from Small Things Matter: The key role of handyperson services, Care & Repair England 2006

9.10 Entry by Intruders – Demonstrating the true local picture: Bristol City Council³⁴

Key points:

- The use of local statistics
- Targeting available resources to need

Local costs and statistics can be transposed to show real cost benefit. An example is given below.

Bristol City Council use local crime statistics to judge the likelihood of an 'entry by intruders' hazard. The number of burglaries per ward was collected from statistics produced by Avon and Somerset police.

The number of properties per ward was then divided by this figure to give the likelihood of a dwelling being burgled or to cause some type of harm outcome. In accordance with the HHSRS guidance it is assumed that all burglaries cause some harm. The figures are being used to give minor works assistance grants where appropriate, in accordance with the council's policy.

Please see the Table below for further details.

Table 9 Average likelihood of household burglary from 2002/3 to 2004/5*

Ward	Average annual household burglaries 2002/3 to 2004/5	Number of dwellings (census data)	Likelihood ratio
Ashley	431.00	5127	12
Cabot	320.33	4266	13
Lawrence Hill	368.00	5637	15
Filwood	262.67	4575	17
Cotham	225.00	4978	22
Easton	214.33	4981	23
Bishopston	208.33	4854	23
Knowle	186.67	4506	24
Horfield	189.67	4730	25
Southville	196.00	4894	25
Windmill Hill	208.67	5330	26
Hartcliffe	182.00	4702	26
Whitchurch Park	177.33	4597	26
Lockleaze	169.67	4489	26
Southmead	169.33	4513	27
Redland	167.33	4523	27

*calculated using Avon and Somerset constabulary statistics

Continued on next page

³⁴ Housing Health and Safety Rating System – Hazard 12 – Entry by Intruders: A local evaluation, Bristol City Council Marion Roderick 2007

Table 9 Average likelihood of household burglary from 2002/3 to 2004/5* *continued*

Ward	Average annual household burglaries 2002/3 to 2004/5	Number of dwellings (census data)	Likelihood ratio
Eastville	175.33	4895	28
Henbury	150.00	4362	29
St George West	165.33	5006	30
Clifton East	153.33	4657	30
Stoke Bishop	109.00	3370	31
Bishopsworth	143.33	4750	33
Frome Vale	138.67	4688	34
Westbury on Trym	125.33	4568	36
Clifton	135.33	4951	37
Hengrove	131.00	4835	37
Kingsweston	120.33	4580	38
Bedminster	125.67	4973	40
Hillfields	124.67	5210	42
Brislington East	119.67	5097	43
Avonmouth	122.67	5254	43
Henleaze	98.00	4386	45
St George East	101.67	4970	49
Brislington West	87.67	4539	52
Stockwood	84.67	4491	53
Bristol total	6088.00	166,374	27
			95% confidence interval (24-31)

*calculated using Avon and Somerset constabulary statistics

9.11 Overcrowding: Islington Borough Council

For further information please contact Paul Mishkin at: paul.mishkin@islington.gov.uk

Key points:

- Use of census data
- Linking health data and HHSRS
- Providing evidence for early intervention

This Health Impact Assessment project looks at a range of local statistics and compares them with the HHSRS to find the priorities for action within Islington.

The project was carried out by an environmental health practitioner who works for both Islington Borough Council and Islington Primary Care Trust (PCT). The overcrowding topic is included below as an example.

Overcrowding

This hazard, known as ‘crowding and space’, is of obvious significance in Islington due to its high density, highly urban nature.

A detailed report, *Space to wind down: Tackling the effects of overcrowding*, by Islington’s Housing, Performance and Property Department³⁵ highlighted a worrying trend that showed overcrowding is increasing in the borough.

A breakdown of these figures by tenure revealed that overcrowding in the private rented sector had decreased from 5.95 percent in 1991 to 4.75 percent in 2001, whereas the levels of overcrowding in the social sector increased in this time (from 5.74 percent to 8.05 percent in council stock and from 4.17 percent to 6.30 percent for housing association stock). The Residential Enforcement Housing (REH) team do not have the power to effect council stock but it does have power over Residential Social Landlord (RSL) stock.

One of the key recommendations to come out of the *Space to wind down* report is the use of private sector stock to provide

accessible, affordable and quality accommodation to take some of the overspill from overcrowded social housing.

All of the other issues dealt within this project, and indeed those other hazards that make up the full complement of HHSRS, will need to be taken into account to ensure that people from overcrowded households moved to the private sector are not moved into a separate set of problems.

Another source of information specific to Islington was produced as part of the Neighbourhood Renewal Fund (NRF) project in 2004. Various maps were produced which add a further layer of detail in identifying which parts of the borough suffer from higher levels of overcrowding, deprivation, etc. These can then be compared with Census data to see if various wards should be prioritised for action against overcrowding, as well as comparing this data with maps showing RSL accommodation to help identify those areas in the private sector.

Table 10, using data from the 2001 census, indicates levels of overcrowding by ward. An occupancy rating of minus one means that there is one room too few to accommodate the occupants to the overcrowding standard.

An occupancy rating of minus two means that there are at least two rooms too few. However, this data assumes that each single household will require two common rooms and one bedroom, and households of two or more people will need two common rooms plus one bedroom for each relevant unit i.e. a couple, a person 16 years or older and up to a pair of children up to the age of 15 (and of the same sex when they are 10 and older).

This standard relating to how many people can sleep in any suitable room is known as the ‘bedroom standard’ and is a slightly

³⁵ Health Impact Assessment Project: Residential Environment Health Service and the use of the Housing Health and Safety Rating System, Paul Mishkin, Residential Environmental Health, Public Protection, Islington Borough Council, January 2008

misleading definition because living rooms and dining rooms can all be counted as suitable 'sleeping rooms' under this standard.

The Census definition of overcrowding is not coterminous with the bedroom standard as it provides for two extra rooms plus sleeping rooms; the bedroom standard would consider these two extra rooms within the standard itself as suitable for sleeping rooms.

Furthermore the other statutory standard under Part X of the Housing Act 1985, a 'fixed space standard' which details the minimum room sizes for certain numbers of occupants, is not directly comparable in any way to the Census data. However, this standard, which dates from 1935, and is by no means a modern standard is due to be replaced in the near future as set out under the Government's recent *Tackling overcrowding in England: An action plan 2007* document.

Nevertheless the data is useful in providing an estimation of overcrowding, albeit artificially inflated from the actionable bedroom standard, so there needs to be an extra degree of caution in interpreting and applying these statistics. For this reason the average likelihoods have been calculated using the minus two occupancy rating as being more closely linked to the actual bedroom standard, considering the two extra overcrowded rooms taken into account by this method.

This data can be useful in identifying what parts of the borough may need to be prioritised to tackle overcrowding although, as stated above, the problem is more acute in council stock than the private rented and housing association sectors. Nevertheless, levels are still above national average and justify intervention.

Table 10 Occupancy rates and wards in Islington

Ward	Occupancy rating – 1	Occupancy rating – 2	Total overcrowded occupancies	Number of households	Density	Average overcrowded households 1 in
Hillrise	755	387	1,142	5,005	137.98	13
Tollington	969	553	1,522	5,766	147.13	10
Finsbury Park	1,004	586	1,590	5,537	135.84	9
Highbury West	805	437	1,242	5,183	107.98	12
Highbury East	725	312	1,037	4,845	102.39	16
Mildmay	920	452	1,372	5,477	137.31	12
Canonbury	777	342	1,119	4,736	122.62	14
St Mary's	866	341	1,207	5,127	120.84	15
St Peter's	842	385	1,227	5,257	135.03	14
Bunhill	950	441	1,391	5,028	92.31	11
Clerkenwell	884	314	1,198	4,632	104.57	15
Barnsbury	796	372	1,168	4,887	123.90	13
Caledonian	842	469	1,311	5,139	101.61	11
Holloway	953	487	1,440	5,160	111.07	11
St George's	835	433	1,268	5,184	132.17	12
Junction	866	405	1,271	5,318	105.27	13
Islington total	13,789	6,716	20,505	82,281	118.30	12
London total	325,013	197,458	522,471	3,015,997	45.62	15
England total	1,026,030	431,482	1,457,512	20,451,427	3.77	47

10.0 Appendices

10.1 Appendix 1: Evidence linking housing and health

Although now dated one of the simplest studies showing the cost of accidents in the home was carried out in Northern Ireland by the Royal Society for the Prevention of Accidents (ROSPA) in 1994³⁶.

The table is reproduced below. More recent studies aim to show the costs of illness and the savings through home improvements.

Table 11 Estimated cost per home accident

Severity	Total (£)
Fatal	784,090
Serious	23,830
Slight (hospital treated)	3,920
Slight (GP treated)	120
Average (non fatal)	8,300
Average	9,460

Improving security and reducing depression

A direct cost benefit link between improving security in a group of dwellings and cost savings to the NHS in terms of reducing the number of patients with clinical depression is shown in a Health Impact Assessment carried out in Sheffield³⁷.

The paper uses figures from the Office of National Statistics (ONS) to estimate the number of likely cases of depression as an emotional consequence of burglary. This is compared with the NHS treatment costs for depression in England. The estimate is that the Decent Homes program in Sheffield will save the NHS £300,000 annually by providing enhanced security.

Reducing overcrowding and improving conditions

The qualitative benefits and the cost of poor housing was demonstrated in a study in East London where measurements were taken before and after regeneration³⁸.

Quoting from previously published work Peter Ambrose gives the following figures showing health gain in central Stepney between 1996 and 2001 following a renewal scheme:

Table 12 Health gain in Stepney

	1996	2000
Numbers of persons per habitable room	1.43	1.13
Progress as expected at school (%)	39.3	54
Everyone is warm enough (%)	30.8	68
Illness days per person/day (%)	0.37	0.05
Illness required visit to doctor (%)	74.6	59.4
Illness required visit to hospital (%)	20.4	5.2
Illness episode required a doctor (%)	74.6	9.4

As part of the Stepney study an attempt was made to compare the costs of health and policing. The study dates from 1996 but is still relevant.

Table 13 Comparison of costs

	Poor housing in Stepney	Improved housing in Paddington
Health costs (GP and some hospital costs)	£515	£72
Some police costs	£380	£85

Shelter has reported that 955,000 children now live in overcrowded homes³⁹. This is 50,000 more than three years ago. With an increasing migrant population and rise in house prices this increase is likely to continue.

Conditions within overcrowded, temporary accommodation can be more extreme than those in social accommodation where there is an expectation of some hope. Private sector accommodation is increasingly used to house families.

³⁶ TRL Report 225, Clackmannanshire Council Project, June 1994

³⁷ Decent Homes Better Health, Sheffield Decent Homes, Health Impact Assessment, Jan Gilbertson, Geoff Green and David Ormandy, Sheffield Hallam University 2006

³⁸ The Health and Other Costs Generated by Poor Housing, Peter Ambrose 2005

³⁹ Nowhere to grow, Anita Pati, *Inside Housing*, September 2007

Some of the problems associated with overcrowding are social and according to campaign group Shelter children living in poor housing are nearly twice as likely as other children to leave school without any GCSEs. This is due in part to a lack of quiet place for homework and parents may lack a quiet space to communicate leading to stress and depression. The physical illnesses of asthma, bronchitis and other respiratory problems are still present.

Falls

Falls in the home are a major cause of distress and can lead to long term disability. Peter Ambrose’s East London study estimates that hip fractures caused by falls cost the NHS £726 million per year. The likelihood of a fall within a dwelling can be estimated and reduced by providing a safer home environment.

A study in the Netherlands in 2006⁴⁰ estimates the cost of different forms of injuries by counting all the likely inputs of an injury i.e. hospital stay, ambulance journeys, GP visits and physiotherapy sessions in units.

The total intervention costs can then be estimated. Hip fractures were found to be the highest costing injury and the 14th most likely accident to happen.

Cold

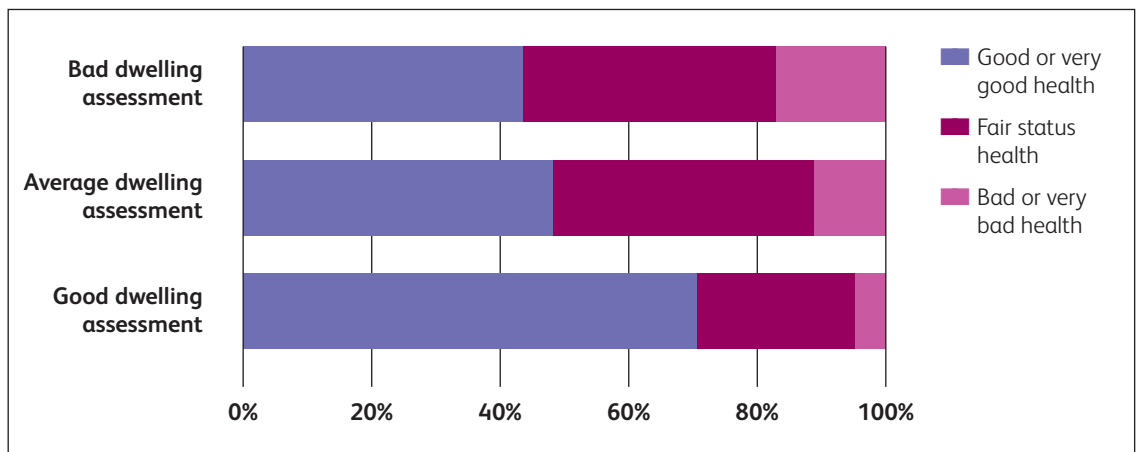
Treatment of cold-related illnesses and conditions is a substantial financial drain on the NHS approximately £1 billion per year. Cold conditions heavily impact on circulation and around half of excess winter deaths are circulatory in cause. The number of excess winter deaths in England and Wales is estimated as 25,000 to 45,000 per year⁴¹.

Damp

The World Health Organization (WHO) has been conducting a long term comparison study of eight European cities, the *Large Analysis and review of European Housing and Health Status* (LARES) project.

The study uses assessments by professionals and questionnaires to occupants to show the links between housing quality and perceived health.

Table 14 Relationship between housing quality and perceived health



⁴⁰ Incidence and costs of injuries in The Netherlands, Willem Jan Meerding, Saakje Mulder, Ed F. van Beeck, *European Journal of Public Health*, Vol. 16, No. 3, 271–277 2006. Published by Oxford University Press on behalf of the European Public Health Association

⁴¹ Available here: www.socialexclusionunit.gov.uk/downloaddoc.asp?id=797

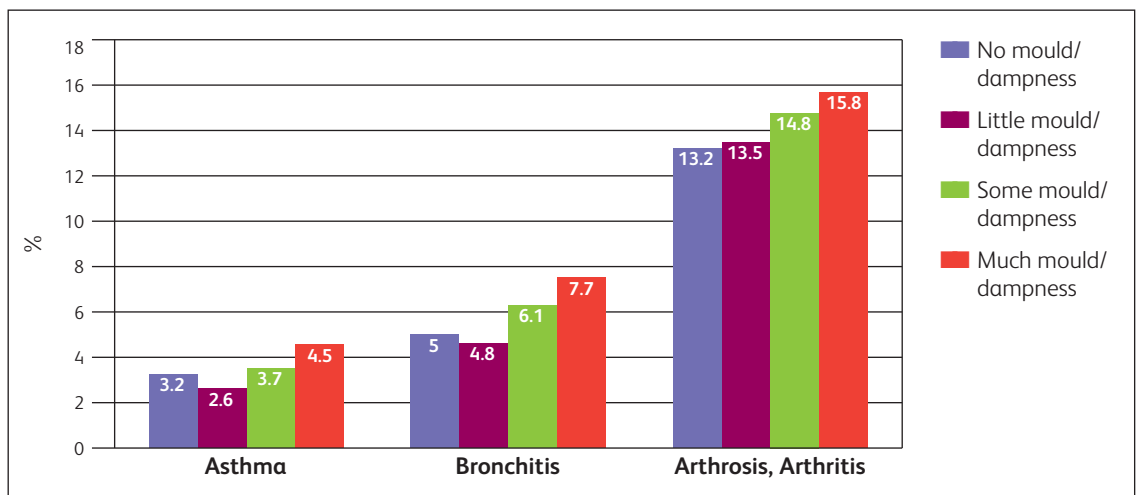
In depth analysis of the relationship between damp and the prevalence of damp-related illnesses shows both chronic and acute conditions are worsened in parallel with poor conditions. The graph below shows the relationship for three chronic illnesses: asthma, bronchitis and arthritis.

The in depth analysis between eight different cities, none of which were in England, supports the view that poor housing conditions are related to poor health:

“LARES supports the view that people with poor health and negative wellbeing are more likely to live in poor housing. Improving housing conditions will improve health and save money.”

Dampness has an association with a number of other housing hazards such as cold and overcrowding. It is associated with a range of physical and psychological illness and is often an indicator of poor housing generally.

Table 15 Prevalence of some chronic diseases by mould/dampness categories



10.2 Appendix 2: Showing links with costs

Linking the benefits associated with interventions to improve homes with cost savings in the NHS is notoriously difficult. But if the consequences of a fall down the stairs could be costed and compared with the cost of prevention this would provide the basis for a simple quantitative methodology of when intervention should be available.

This is only one method of measuring costs and the simplest to explain. It is known as 'cost-offset'. The *Cost-offset* study by Kelly et al 2005⁴² also provides a number of further methods of quantifying costs. Simplified explanations of other methods are provided below, from the National Institute of Clinical Excellence (NICE) publication: *Measuring Impact 2005*⁴³.

They include:

Cost-minimisation analysis

This method extends the economic analysis further by considering an alternative use of the resources.

Cost-effectiveness analysis

The most commonly used approach, focusing on the single outcome or health benefit of an intervention and the resulting costs. But most interventions have multiple outputs, making cost-effectiveness analysis difficult to use. The solution to this is to weight outcomes in terms of money (cost-benefit) or in terms of utility or future use.

Cost-utility analysis

Measures and values the impact of an intervention in terms of a health-related improvement in a person's quality of life. This method allows for comparisons across areas of an intervention, but does not capture the broader, psychosocial, non-health related impact of a public health intervention.

Cost-benefit analysis

The method looks at costs and benefits in monetary terms. If benefits exceed costs the intervention is recommended. This method has difficulties with regard to the value in monetary terms of the benefits to a person's life. This value judgement has to stand up to political and public scrutiny.

Cost-consequence analysis

Similar to cost-effectiveness analysis, but can be used to measure interventions with more than one outcome. For each alternative outcome the evaluation calculates all the costs and all the relevant outcomes. The outcomes are weighed up and compared with the costs. This has advantages as it does not synthesise costs and benefits into one outcome and can look at multi-dimensional interventions. However, the lack of a single outcome measurement means it cannot be used to rank interventions.

This calculator only aims to look at cost-offset, the simple method or starting point for cost information.

⁴² Economic Appraisal of Public Health Interventions, Kelly et al, Health Development Agency 2005

⁴³ Measuring Impact: Improving the health and wellbeing of people in mid-life and beyond, National Institute Health and Clinical Excellence 2005

10.3 Appendix 3: The strategic context

The success of the private sector housing function is judged by the Audit Commission by reference to Key Lines of Enquiry (KLOE)⁴⁴ These are organised into sections:

Of relevance to private sector housing are the following:

1. Local Authority Strategic Housing Role (including community wide housing services) and (relevant to all local housing authorities).
 - Strategic Approach to Housing
 - Homelessness and Housing Needs
 - Private Sector Housing
 - Allocations and Lettings (as appropriate)
 - Supporting People (as overseen by administering authorities)
 - Housing Regeneration and Neighbourhood Renewal (within the specialist functions section)
2. The KLOE 9 for private sector housing which benefit from more accurate information related to the wider definition of health are reproduced below:

Private sector stock condition and housing need data

How good is the council's understanding of private sector stock condition and housing needs and does it have an accurate baseline of the critical information to the sector?

The strategic approach to private sector housing

How clear and comprehensive is the council's approach to private sector housing, either through a stand alone Private Sector Housing Strategy or as a distinct part of the wider housing strategy and housing policies?

How well is the council's approach to private sector housing addressing the key housing issues in the area?

Has the council utilised the full range of powers available to it to tackle the issues within its private sector?

How well has the council implemented and delivered its objectives in meeting the needs of private sector housing?

How well is the council working with partners and other organisations to increase capacity and reduce costs?

The impact of the strategic approach – how effectively is the council tackling poor housing conditions in the private sector?

Is the council being effective in addressing poor conditions in the private sector housing market?

Is the service effectively supporting disabled people to live independently in their homes?

How effective is the monitoring of the private sector housing strategy and does performance inform future activity?

Value for money

How well does the organisation maximise the impact from its resources for private sector housing?

How effectively has the organisation established partnerships geared to achieve value for money and improving its performance to service users?

Has the organisation used procurement to achieve value for money in delivering services that benefits service users and others?

A number of the KLOEs which emphasise partnership working are highlighted. A further list is produced for regeneration and neighbourhood renewal, many of which are relevant to private sector housing generally.

⁴⁴ Housing Directorate – Key Lines of Enquiry, Audit Commission 2007

Using this toolkit it should be possible to demonstrate the importance of enforcement in private sector housing as a role in health promotion.

3. The Audit Commission similarly sets KLOEs for Primary Care Trusts (PCTs). When drawing up their strategy they are required to consider the objectives and priorities of partner organisations. Relevant questions which the Audit Commission require are reproduced below⁴⁵:

“The PCT has put in place arrangements for setting, reviewing and implementing its strategic and operational objectives.”

“5.1.2 Objectives give some attention to the priorities of other partners and the wider community. The PCT actively works with local authority partners to reflect shared priorities in its own objectives.” *These are now included in Local Area Agreement’s discussed in the main document.*

There are also KLOEs developed under the cross cutting agenda for community safety which are of relevance to private sector housing.

Best Value Indicators and public sector agreements targets

Local authorities are required to report to the CLG annually on a number of statistics designed to show they are active in tackling the Government set priorities.

The number of empty homes that have been filled or demolished through local authority influence (BVI69) can be directly related to private sector housing.

BVI26 relates to the fear of crime and specifically to the number of domestic burglaries. This indicator is reported on by the police but relates directly to the dwelling associated hazard of entry by intruders.

The Decent Homes agenda is linked to promoting better communities, reducing crime, improving employment and educational achievement. When it was introduced the ODPM stated:

“A Decent Home is a home that is warm, weatherproof and has reasonably modern facilities.

“Decent Homes are important for the health and wellbeing of those living in them. Poor housing helps an area to get a bad reputation. That makes it an unpopular place to live, which in turn may lead to the breakdown of communities.

“A Decent Home is a key element of any thriving, sustainable community.”

⁴⁵ NHS Audit 2006/07 – Key Lines of Enquiry for Auditors’ Local Evaluation Assessments – Primary Care Trusts, Audit Commission

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Chartered
Institute of
Environmental
Health

Chartered Institute of Environmental Health
Chadwick Court 15 Hatfields London SE1 8DJ
Telephone 020 7928 6006 **Fax** 020 7827 5831
Email info@cieh.org **Web** www.cieh.org
Registered Charity No. 290350