Website Toolkit – Asthma and Housing

A home is a central part of people’s lives. Good housing can help to improve physical and mental health and well-being. Poor housing, particularly damp, mould, inadequate ventilation and the presence of allergens can exacerbate asthma and other respiratory illnesses.

Asthma is a clinical diagnosis based on a set of respiratory symptoms associated with changes in the way people’s lungs work. The most common symptoms are wheezing, chest tightness and cough.

Asthma places a significant demand on our health and social care services and impacts on adults and children, the effects of which can last a lifetime, particularly if school attendance is affected.

Levels of asthma in Wales are reported to be amongst the highest in the world. Around 260,000 people live with it, of which 55,000 are children. This means that around 10 per cent of people are currently being treated for doctor-diagnosed asthma. It places a significant demand on our health services.

Every year in Wales, 4,000 people are admitted to hospital for asthma. The rate for adult admissions is nearly a third higher than the rest of the UK. Deaths from asthma are also more common here than anywhere else in the UK. Yet, it is a condition that most people should be able to control. Three quarters of hospital admissions and 90 per cent of asthma deaths are preventable.

Welsh property surveys in 2004 and 2008 examined around 5,200 houses of which 5 per cent – one in twenty - were found to be ‘unfit’. Almost 60 per cent of properties identified as being ‘unfit’ had significant damp problems and inadequate ventilation or heating.

Respiratory disease is the cause in one in seven of all deaths in Wales; the third largest cause of death for both women and men in Wales and it is by far the most commonly reported long-term condition in childhood.

Although there are limited economic studies looking at the cost effectiveness of asthma and improved housing (mainly due to the difficulties of undertaking them), it is estimated that the total cost to society of dealing with certain housing hazards was estimated at £168 million a year. Fitting houses with particular modifications can yield benefits worth up to twice the cost, and tailored housing improvements in the homes of children and their families with moderate or severe asthma are highly likely to be a cost effective use of public resources.

Highlighting the benefits of health and housing working together, The King’s Fund and the Building Research Establishment (BRE) refer to poor housing costing the NHS at least £2.5 billion a year in treating people with illnesses directly linked to living in cold, damp and dangerous homes. This is with regard to just first year costs alone and is still an underestimate of the true picture. Further information can be found here - https://www.bre.co.uk/healthbriefings
Evidence

The evidence suggests that real and measurable differences can be made to improve health by increasing awareness about the links between poor housing conditions and asthma to prompt more preventative action. Encouraging individuals and families who suffer from asthma and poor housing conditions to ask for advice and support, together with providing useful information about what works has been shown to be effective.

The evidence also shows the need to forge stronger links between professionals from the housing and health sector, together with developing and evaluating evidence based local action.

The following gives the evidence for health and housing;

1. A combination of tailored housing improvements, combined with educational and raising awareness programmes, together with the alleviation of fuel poverty can be used to improve overall physical and mental health and well-being of the occupants.

2. Reducing exposure to damp and moulds and improving ventilation can be effective in improving overall health and quality of life and reducing asthmatic symptoms. A study in Wales evaluated the effectiveness of action in the homes of children with moderate or severe asthma. A tailored package of ventilation and heating improvements was made after a visit from a housing officer. Follow-up after four and twelve months found that quality of life had improved significantly at four and twelve months. This study was in-keeping with a previous study which found that visible indoor mould removal, fungicide application and installing a fan in the loft space has health benefits. Whilst the study could not find evidence of benefits on individuals through breathing tests, their symptoms had decreased as had their use of medication.

3. At present, available evidence suggests that chemical methods to reduce exposure to dust mites cannot be recommended. However, some simple practical steps such as washing bedding in hot water, putting allergen-impermeable covers on pillows and mattresses and vacuuming and steam cleaning carpets and upholstered furniture are believed to reduce dust mite allergen levels. It may also be possible that childhood exposure to household dusts and allergens could actually be protective of health by boosting immune systems.

4. Economic evaluations show that housing improvements, particularly warmth, ventilation and energy efficiency lead to a good return on investment. There is substantial evidence to suggest that home visits by staff trained to assess and change the home environment, combined with education about asthma, is effective. This has included training and education in the self-management of asthma, general asthma education about factors that affect it, and social services and support or co-ordinated care for asthma sufferers. Reports have found such interventions improved asthma symptoms and reduced the number of school days missed.
‘Together for Health – A Respiratory Health Delivery Plan’

A Programme for Government ‘Together for Health – A Respiratory Health Delivery Plan’ sets out a 3 year respiratory health plan for up to 2017 for Wales, to reduce the impact of respiratory conditions and the main actions that need to be implemented by The NHS and its partners to improve healthcare outcomes.


The following actions are recommended to progress this work locally:

- Forge stronger links between housing and health practitioners through the development of National and Health Board Respiratory and Health Delivery Plans.
- Co-ordinate multi agency housing and asthma advice for key stakeholders (housing/health practitioners, tenants and patients).
- Develop a training and education programme for key stakeholders.
- Develop, implement and evaluate a local evidence based housing and asthma intervention.
- Use prudent health care approaches, co-production, and asset based approaches as ways of working.
- Strive for improved collaboration between housing and health practitioners to achieve better health gains.

The evidence suggests that real and measurable differences can be made to improve health by:

- Increasing awareness about the links between poor housing conditions and asthma to prompt more preventative action.
- Encouraging individuals and families who suffer from asthma and poor housing conditions to ask for advice and support.
- Providing useful information about what works.
- Forging stronger links between professionals from the housing and health sector.
- Developing and evaluating evidence based local action.
## Useful contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louise Woodfine</td>
<td>Principal Public Health Practitioner</td>
<td>North Wales Public Health Team, Wrexham Technology Park, Wrexham, LL13 7YP Tel: 01978 726701 Email: <a href="mailto:Louise.Woodfine@wales.nhs.uk">Louise.Woodfine@wales.nhs.uk</a></td>
</tr>
<tr>
<td>Amy Lewis</td>
<td>Health &amp; Well-Being Improvement Manager</td>
<td>Planning &amp; Partnerships Cwm Taf Health Board, Ynysmeurig House, Navigation Park, Abercynon, Rhondda Cynon Taf, CF45 4SN Tel: 01443 744844 Email: <a href="mailto:Amy.Lewis4@wales.nhs.uk">Amy.Lewis4@wales.nhs.uk</a></td>
</tr>
<tr>
<td>Paul Mee</td>
<td>Service Director Public Health &amp; Protection</td>
<td>Community and Children’s Services Rhondda Cynon Taf County Borough Council Ty Elai, Dinas Isaf East, Williamstown, Tonypandy CF40 1NY Tel: 01443 425513 Mob: 07786 523747 Email: <a href="mailto:Paul.J.Mee@rctcbc.gov.uk">Paul.J.Mee@rctcbc.gov.uk</a></td>
</tr>
<tr>
<td>Louise Davies</td>
<td>Head of Environmental Health, Trading Standards and Community Safety</td>
<td>Public Health and Protection Rhondda Cynon Taf County Borough Council Ty Elai, Dinas Isaf East, Williamstown, Tonypandy CF40 1NY</td>
</tr>
<tr>
<td>Name</td>
<td>Role</td>
<td>Address</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Huw Brunt</td>
<td>Consultant in Environmental Health Protection</td>
<td>Health Protection Team, Public Health Wales, Temple of Peace and Health, Cathays Park, Cardiff CF10 3NW</td>
</tr>
<tr>
<td>Angela Jones</td>
<td>Consultant in Public Health</td>
<td>Cwm Taf Public Health Team, Public Health Wales, Keir Hardie University Health Park, Merthyr Tydfil, CF48 1BZ</td>
</tr>
<tr>
<td>Kristian James</td>
<td>Principal Environmental Public Health Specialist</td>
<td>Health Protection Team, Public Health Wales, Temple of Peace and Health, Cathays Park, Cardiff CF10 3NW</td>
</tr>
<tr>
<td>Sarah Jones</td>
<td>Consultant in Environmental Health Protection</td>
<td>Health Protection Team, Public Health Wales, Temple of Peace and Health, Cathays Park, Cardiff CF10 3NW</td>
</tr>
</tbody>
</table>

Email: Louise.M.Davies@rctcbc.gov.uk
Further information on health and housing can be found in the following resources: