



## SHEFFIELD HEALTH AND WELLBEING BOARD PAPER

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**Report of:** Tim Furness, Director of Business Planning and Partnerships,  
NHS Sheffield CCG

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**Date:** 24 September 2015

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**Subject:** Climate change and air quality: an update for the Health and  
Wellbeing Board

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### Summary:

The World Health Organisation has described the impact of climate change on health, principally through increased greenhouse gas emissions as the greatest threat to public health and the defining issue of the 21st century. In addition, an estimated 800 premature deaths per year in Sheffield are attributable to poor air quality.

The Health and Wellbeing Board's role is to oversee the improvement of health and wellbeing in Sheffield. Considering issues such as climate change and poor air quality is essential in supporting Sheffield people to stay healthy and well, and the Board is in a unique position to investigate ways to improve approaches to tackling them.

At its March 2015 meeting, the Health and Wellbeing Board committed to hearing more about both climate change and air quality. This paper updates the Board and recommends further work for the Board in this area.

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### Recommendations:

It is recommended that the Board:

- Considers whether it can add value by supporting cross-organisational work on developing sustainable procurement practices or on managing medicines sustainably
- Thanks organisations across Sheffield for the work they are doing to act sustainably.

### Background papers:

Reports submitted to the Board in March 2015:

<http://sheffielddemocracy.moderngov.co.uk/ieListDocuments.aspx?CId=366&MId=5651&Ve r=4>.

# **CLIMATE CHANGE AND AIR QUALITY: AN UPDATE FOR THE HEALTH AND WELLBEING BOARD**

## **1.0 SUMMARY**

The World Health Organisation has described the impact of climate change on health, principally through increased greenhouse gas emissions as the greatest threat to public health and the defining issue of the 21st century. In addition, an estimated 800 premature deaths per year in Sheffield are attributable to poor air quality.

The Health and Wellbeing Board's role is to oversee the improvement of health and wellbeing in Sheffield. Considering issues such as climate change and poor air quality is essential in supporting Sheffield people to stay healthy and well, and the Board is in a unique position to investigate ways to improve approaches to tackling them.

At its March 2015 meeting, the Health and Wellbeing Board committed to hearing more about both climate change and air quality. This paper updates the Board and recommends further work for the Board in this area.

## **2.0 WHAT DOES THIS MEAN FOR SHEFFIELD PEOPLE?**

The impact of public health issues such as smoking, physical inactivity and alcohol, while significant, are not universal. However, climate change and air quality affect all of Sheffield's population. Storms, floods, heatwaves and cold weather spells are issues that have a direct impact on a population's morbidity and mortality, while the availability of food and water, and the spread of disease, are indirect impacts of climate change.

If Sheffield managed and ran a low carbon and sustainable health and social care system, it would minimise damage to the climate and therefore improve the health of future generations. Currently over 10% of Sheffield's carbon footprint is generated by the NHS, public health and social care system through the procurement of goods and services, pharmaceuticals, medical instruments, building energy use and travel. By 2050 the 2008 Climate Change Act requires an 80% reduction in carbon emissions.

Sheffield's [Joint Health and Wellbeing Strategy](#) recognises that air pollution is an issue and suggests that the Air Quality Action Plan is delivered comprehensively across the city. It encourages Sheffield's organisations and partners to actively look to improve health and wellbeing across all areas 'even those not traditionally seen as being about health and wellbeing'. The Strategy hopes that this will be achieved by influencing partners and organisations 'to consider and demonstrate the positive health and wellbeing impacts of policies'.

## **3.0 THE DIRECTOR OF PUBLIC HEALTH REPORT 2014: WHAT CAN THE BOARD DO IN RESPONSE?**

The Director of Public Health report had three recommendations that were aimed specifically at the Health and Wellbeing Board. These have been put below with a response from the Board:

Recommendation for the Board	The Board's response
<p>1. <b>The Health and Wellbeing Board, and Sheffield's NHS Foundation Trusts, should adopt an explicit sustainability policy aimed at ensuring that Sheffield meets its carbon reduction obligations by 2020. This should be underpinned by the adoption of a sustainability manifesto for the health and social care system in the City.</b></p>	<p>The CCG Low Carbon Group is currently mapping activity and good practice on sustainability by NHS organisations operating in Sheffield and is encouraged by the range of measures taken on reducing carbon in areas such as energy use in estates, reducing fuel consumption and more sustainable food.</p> <p>It is not clear that adopting a formal policy would add value. However, a good next step would be to focus on areas where we can add the most value. This could include cross-organisational working on developing sustainable procurement practices or on managing medicines sustainably. The NHS Sustainable Development Unit assessment is that procurement is 61% of NHS' carbon footprint with pharmaceuticals and medical instruments as the largest component; 80% of the pharmaceutical footprint relates to primary care and community services.</p> <p>The HWB might wish to sponsor such work, or delegate responsibility to named officers.</p>
<p>2. <b>The Health and Wellbeing Board should give urgent consideration to the ways in which the implications for carbon emissions of different approaches to the delivery of health and social care in the City can be evaluated. A system of carbon accounting needs to be developed.</b></p>	<p>Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield Children's NHS Foundation Trust, Sheffield Health and Social Care NHS Foundation Trust all report on carbon emissions within their Sustainability Reports in their 2014/15 Annual Reports. Sheffield CCG's Annual Report 2014/15 contains the required Sustainability Report but does not include carbon accounting. Yorkshire Ambulance Service reports using the NHS Sustainability Unit template to produce their Sustainability Report but only the 2013/14 Annual Report is available on their website.</p> <p>In summary, all Foundation Trusts operating in Sheffield are producing Sustainability Reports which include carbon accounting. It could be recommended that Sheffield Clinical Commissioning Group strengthen their Sustainability Report to include carbon accounting.</p>
<p>3. <b>The Health and Wellbeing Board should consider how to enforce and report on actions set out in the Heatwave Plan for health and social care facilities such as care homes, before next summer.</b></p>	<p>Systems are in place in NHS organisations to ensure that the Heatwave Plan is in place. The plan is linked from the Council's website and updated every May when the new Heatwave Plan is published by Public Health England, the Department of Health and NHS England. Home care and care home providers known by Adult Social Care Commissioning are made aware of this.</p> <p><i>NB The Council is requesting information on routine monitoring visits over the summer about how care homes managed the recent heatwave and whether they had plans in place and activated them. These details are due back in the autumn.</i></p>

#### **4.0 AIR QUALITY IN SHEFFIELD: AN UPDATE FOR THE BOARD**

Kings College London - commissioned by the Greater London Authority and Transport for London - conducted a study of air quality in London which considered the health impacts of NO<sub>2</sub> and PM<sub>2.5</sub>. The outcomes were [reported in the Guardian newspaper in July 2015](#). The study is believed to be the first by any city in the world to attempt to quantify how many people are being harmed by NO<sub>2</sub>.

The new study estimates the annual premature deaths due to PM<sub>2.5</sub> (2010 levels) in London to be 3,537. The study estimates that there are an additional 5,879 deaths from NO<sub>2</sub> each year in London, bringing the total early deaths from both pollutants in 2010 to 9,416.

The government's scientific advisers, the Committee on the Medical Effects of Air Pollutants, are expected to conclude that nationally 60,000 premature deaths annually can be attributed to the two pollutants, NO<sub>2</sub> and PM<sub>2.5</sub>, whereas a King's College London study due to be published in the autumn is expected to put the figure for deaths annually in the UK at 80,000 for both pollutants.

Using 1% of the national figure to estimate early deaths in Sheffield due to air pollution, this would see the expected number of premature deaths rise from the previously quoted figure of 500 to between 600-800 premature deaths due to air pollution (NO<sub>2</sub> and PM<sub>2.5</sub>) per annum. It is worth noting that this report is yet to be finalised and published and therefore these figures should be treated with caution, and that the overall number of deaths attributed to poor air quality are increasing because of a new method of calculation to include NO<sub>2</sub> rather than because of a significant change in air quality.

The whole of the urban area of Sheffield is an Air Quality Management Area (AQMA) for both PM<sub>2.5</sub> and NO<sub>2</sub>. An Air Quality Action Plan (AQAP) 2015 sets out how air quality issues will be tackled in Sheffield. Recent successes through Government funding include:

- Introduction of 40 new low emission hybrid buses and purchase of 18 diesel hybrid mini-buses and 10 Euro VI wheelchair accessible (17 seat) mini-coaches for use on Home to School transport services
- Being shortlisted for the Go Ultra Low City Bid and for the ULEV Taxi Scheme Bid in June 2015 and awarded a Fully Funded Feasibility Study to analyse the Local Taxi Market.

#### **5.0 RECOMMENDATIONS FOR THE HEALTH AND WELLBEING BOARD**

It is recommended that the Board:

- Considers whether there is value in supporting cross-organisational work on developing sustainable procurement practices or on managing medicines sustainably
- Thanks organisations across Sheffield for the work they are doing to act sustainably.