### Joint Health & Wellbeing Partnership and Board Meeting - 4<sup>th</sup> September 2012

### Agenda Item: 10

Title	Stockton-on-Tees Seasonal Health & Wellbeing Strategy			
Date	4 <sup>th</sup> September 2012			
Purpose of Paper &				
Response required	<ul> <li>The Health and Wellbeing Partnership and Board members are asked to: <ol> <li>Notethe detail of the Draft Seasonal Health and Wellbeing Strategy</li> <li>Provide any additional information for inclusion in the strategy</li> <li>Sign up to and support the work outlined in the strategy</li> <li>Agree the group/structure who will be responsible for overseeing the implementation of the strategy and its associated action plans</li> <li>Identify a lead person form each organisation who will help to develop and implement the actions necessary to deliver on the strategy</li> </ol> </li> <li>Agree how the Health and Wellbeing Partnership and Board wish to receive progress updates on the implementation of the strategy and associated action plans.</li> </ul>			

Organisational logos to be included.

# DRAFT Stockton-on-Tees Seasonal Health & Wellbeing Strategy

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## 1. Preface

Every winter, and increasingly in summer, people in Stockton-on-Tees suffer from the adverse effects of extreme temperatures.

Many deaths, illnesses and hospital admissions are preventable with systematic and co-ordinated action. They are not inevitable, and with ever-rising fuel bills and more frequent hot summers, now is the time to act. This strategy outlines the risks to vulnerable people and how these can be addressed. This strategy builds on the work we have already undertaken locally and will be delivered through effective partnership working.

The evidence base tells us which groups are most at risk and which interventions can have most impact. Through this strategy and associated action plans we will bring together our knowledge and our resources to protect and improve the health and wellbeing of our population.

Summer and winter present different health and wellbeing challenges and this strategy aims to identify a range of interventions that will reduce the impact of extremes of temperature and adverse weather conditions on our local population. We will also improve the energy efficiency of the housing stock and address the growing problem of fuel poverty in Stockton-on-Tees.

Each vulnerable resident in Stockton-on-Tees will, as a matter of course, be referred for multidisciplinary interventions. This will require partnership working across a number of agencies and we hope that this approach will be a model for addressing a number of health inequalities.

The Joint Strategic Needs Assessment (JSNA) recognises seasonal health and wellbeing as an important issue for Stockton-on-Tees and this area of work is also recognised in the Stockton-on-Tees Joint Health and Wellbeing Strategy. The action plans, based on the recommendations arising from this strategy, will be progressed and overseen by the Stockton-on-Tees Health and Wellbeing Board, bringing together agencies from across the statutory and voluntary sectors.

Neil Schneider Chief Executive, Stockton-on-Tees Borough Council

Peter Kelly Director of Public Health, Stockton-on-Tees

# 2. Executive Summary

This strategy incorporates the broader issues of seasonal health and wellbeing, fuel poverty and affordable warmth. The strategy draws together a range of partners and focuses on a systematic approach to improve seasonal health and wellbeing. The JSNA recognises seasonal health and wellbeing as an important issue for Stockton-on-Tees and this area of work is also recognised in the Stockton-on-Tees Joint Health and Wellbeing Strategy. Progress on this strategy and the associated action plans will be overseen by the Stockton-on-Tees Health and Wellbeing Board.

### Seasonal excess deaths and illness

There are many additional deaths and emergency hospital admissions each winter, with a smaller but still significant increase in deaths and admissions arising from heat waves. Improving the quality of housing, widespread uptake of influenza vaccinations, the better management of existing health conditions, adopting healthier lifestyles, reducing fuel poverty and creating affordable warmth and targeting interventions through a coordinated multi-agency approach can all help to improve seasonal health and wellbeing.

### Fuel poverty and creating affordable warmth

Stockton-on-Tees has been at the forefront of affordable warmth work for some time and addressing fuel poverty will play a major part in improving health and wellbeing and tackling seasonal excess deaths.

### Aims and objectives

By working to improve seasonal health and wellbeing through strong local partnerships we can:

- Reduce seasonal deaths and illness and increase resilience to the effects of cold and hot weather
- tackle health inequalities
- improve the housing stock in Stockton-on-Tees
- achieve safer, better insulated homes (warmer in winter and cooler in summer)
- tackle debt and fuel poverty
- support older people to live at home for longer
- support carbon reduction targets.

#### Next steps

- We will bring together a range of partners from across Stockton Borough Council, the NHS, health and care providers and voluntary and community sector to develop and deliver the local action plans.
- We will implement the recommendations of the Health Inequalities National Support Team, building on them for our local conditions.
- We will build on the Stockton-on-Tees Warm Homes Healthy People Project to ensure that all vulnerable residents are identified, referred and systematically offered interventions.
- We will expand and enhance the interventions available to improve seasonal health and wellbeing.
- We will build on our successful work on affordable warmth, targeting and adapting it to improve seasonal health and wellbeing.

- We will promote both behavioural and building management measures to reduce the impact of extreme temperatures on vulnerable residents.
- We will target resources at improving the homes of the most vulnerable.
- We will ensure that advice and support is available to help reduce fuel poverty and assist our population with fuel debt.
- We will develop our knowledge and evidence base to help us target resources appropriately.

# 3. Seasonal Health and Wellbeing

Variations in temperature have been shown to have a detrimental effect on health and wellbeing, with higher rates of deaths, illness and hospital admissions in the winter and, slightly higher rates in periods of extreme heat.

### 3.1. The impact of cold weather on health and wellbeing

### Excess winter deaths and illness

Excess winter deaths (EWDs) is defined as the difference between the numbers of deaths during the four winter months (December – March) and the average number of deaths during the preceding four months (August – November) and the following four months (April – July)<sup>1</sup>.

Excess winter death rates vary across Europe however those countries with the highest rates are Portugal, Spain, Ireland and the UK. Countries with the lowest rates include Finland, Sweden and Denmark, despite them having significantly lower average winter temperatures. There is a strong link between low thermal efficiency standards and high excess winter deaths across Europe.

In the UK, excess winter deaths represent 1 in 20 of all deaths per year and amount to an average of 27,000 additional deaths in winter, as compared with the summer months<sup>2</sup>. The Stockton-on-Tess Joint Strategic Needs Assessment (JSNA) provides us with detailed information on seasonal health and wellbeing and associated determinants of health including housing<sup>3</sup>. The JSNA shows that in Stockton-on-Tees, on average 73 more people die during the winter months compared with other times of the year. Appendix 1 provides a summary of the trends in excess winter deaths for Stockton-on-Tees.

Around 40% of excess winter deaths are a result of cardiovascular disease (including heart attacks and strokes) and around a third of excess winter deaths are due to respiratory illness<sup>4</sup>.Hypothermia is often mentioned in media coverage; however it only contributes to less than 1% of winter deaths<sup>5</sup>.

Exposure to the cold also increases an individual's risk of injuries from falls and fire hazards, contributes to mental health problems, increases social isolation and has a detrimental impact on children's education where houses are not properly heated (see appendix 2).

### 3.2. The impact of hot weather on health and wellbeing

Climate change is projected to lead to more frequent heatwaves such as the one experienced in 2003 that caused approximately 2,000 deaths in the UK with 13 associated deaths and over 50 emergency hospital admissions in the North East<sup>6</sup>.

In the UK, heat-related mortality starts when mean daily temperatures exceed about 18°C<sup>7</sup>. July 2006 was the first time the NHS Heat Plan thresholds were breached in

the North East (day threshold temperature of 28°C and night threshold temperature of 15°C)<sup>8</sup>. A linear progression of deaths was observed with the mortality rate rising by an extra 75 deaths per week for each degree of temperature increase. Significant increases in hospital admissions were also observed. It is important to remember that the number of excess summer deaths will remain a fraction of excess winter deaths even with a significant rise in average temperature.

The main cause of death during hot weather is through cardio-vascular illness or respiratory disease.

- Air quality tends to worsen during heat-waves increasing the incidence of respiratory illnesses.
- A larger quantity of blood than usual is circulated to the skin to help the body cool down. For people with cardio-vascular illnesses, elderly people or people with chronic illnesses, this can place an extra strain on the heart which can lead to a cardiac arrest.
- Sweating and dehydration can lead to an electrolyte imbalance, which can also adversely affect people who are on medication to control heart conditions and other chronic illnesses.

There are also a number of specific heat-related illnesses described in more detail in appendix 3.

### 3.3. Who is most at risk?

Elderly people in particular can be vulnerable regardless of their social background. However, excess winter mortality is linked to poorly heated housing and low household income. Those living in deprived communities are more likely to have many of the risk factors for seasonal excess deaths and ill health. There are higher concentrations of deprivation in North East England than in any other English region<sup>6</sup>.

The groups for whom cold and hot conditions pose the greatest risk are:

- The elderly especially those over 75
- Those with an underlying physical or mental health condition Some medications also make individuals more vulnerable to the effects of cold or heat
- Those who live in poor housing largely those living in older, energy inefficient or exposed properties
- Those living in fuel poverty
- Those living on their own
- Those unable to adapt behaviour to keep warm or stay cool. Including those with dementia, those who have a disability, those who are bed-bound, or those with alcohol dependencies
- Babies and the very young are also affected.

Strategies to reduce the impact of extremes of both heat and cold weather should be targeted at these groups. Evidence shows that a systematic and sustainable framework for identifying vulnerable people and offering and encouraging them to take

up interventions will help to improve their resilience during spells of cold and hot weather and reduce negative impacts on their health and wellbeing2.

### 3.4. Stockton-on-Tees...the local picture

### **Excess Winter Deaths**

The excess winter death (EWD) index for Stockton-on-Tees is slightly less than the England and North East average (2006-2009). However, the EWD Index for Stockton-on-Tees has seen little improvement over the past decade (appendix 1).

The elderly are at higher risk of winter death. In Stockton-on-Tees between 2002 and 2009 89% of EWDs occurred among people aged over 65 years.Excess Winter Deaths and susceptibility to the cold does not equally affect all communities and there are some areas in the Borough where individuals are at much higher risk of Excess Winter Death (appendix 1). This is in part linked to deprivation as living in poverty or fuel poverty increases an individual's risk of winter death.

### **Excess Winter Illness**

Emergency hospital admissions also increase in the winter months with significantly higher rates of emergency admissions for Chronic Obstructive Pulmonary Disorder (COPD), asthma, flu and pneumonia and fall related injury. The elderly and the young are at higher risk of excess winter emergency hospital admissions.

In 2011/12, there was a 73.5% uptake of seasonal influenza vaccination amongst those aged over 65 in Stockton-on-Tees. This met the national target of 70% however there were over 8,000 people in this age group who were not vaccinated and uptake was much lower in some of the other at risk groups including those under 65 years with long term conditions. Stockton-on-Tees has high rates of conditions such as influenza and pneumonia, with a higher than expected rates of emergency admissions for these conditions.

#### Hot weather Impacts

Although there is a clear link between heat and excess death and illness, a heat wave of similar magnitude and duration as the one experienced in August 2003 would only have a small impact on mortality in Stockton-on-Tees, however it is predicted by the MET Office that similar weather conditions will be commonplace by 2050 with peaks of much higher temperatures.

#### Fuel poverty and affordable warmth

The North East of England has the second highest rate of fuel poverty in England, with 24% of households judged to be in fuel poverty<sup>9</sup>. West Midlands has the highest rate of fuel poverty in England with 26% of their homes assessed as being in fuel poverty.

In Stockton-on-Tees the number of homes estimated to be in fuel poverty in 2008 was 14,325, which was approximately 18.4% of the total households in the borough at the time of the report (77,977). That percentage is likely to have increased over the past three years in line with the national trends, because of the significant increases in fuel costs and reduced levels of income due to the economic downturn. The fuel poor areas of Stockton-on-Tees are shown on the map below.



Projections for England for 2011 – 2012 suggest that the number of fuel poor houses in England is to increase to 3.9 million households in 2012. It is expected that in 2012/13 Stockton-on-Tees will have levels of fuel poverty similar to the regional average from with approximately 24% of households in fuel poverty.

### Housing

Cold, damp and poorly maintained housing has a detrimental effect on the health and wellbeing of its occupiers. In Stockton-on-Tees there are 64,836 private sector dwellings of which 57,344 are owner occupied and 7,519 privately rented. There are 17,765 social housing dwellings managed by Registered Social Landlords.

Several well delivered improvement initiatives have helped improve the housing stock in Stockton-on-Tees resulting in a higher than average level of energy efficiency. The housing stock in Stockton-on-Tees now has an average SAP (Housing Energy Efficiency) rating of 61, compared to the national average SAP rating of 55. The highest incidents of fuel poverty in the borough now occur in areas of 'hard to treat' housing with low SAP (energy efficiency) ratings. These homes have not benefited from previous insulation programmes as they are largely solid wall properties which are expensive to insulate. It is estimated that there are 10,700 dwellings in the private sector, that fail to meet the Decent Homes Standard, of which 4,500 (42%) are due to a category 1 hazard failure. Of these 4,500 category 1 hazards:

2100 dwellings (47%) fail because of excess cold issues

- o 1000 dwellings (22%) fail because of falls on the level
- 810 dwellings (18%) fail because of falls on the stairs
- A further 3,900 dwellings fail because they do not provide adequate thermal comfort.

In Stockton-on-Tees there are 25,500 dwellings with a head of household over the age of 60. This represents 39% of the private sector stock. Nationally the figure is 36%. A massive 51% of the borough's households (33,200) have an income less that £14,999 and there are 17,600 private sector dwellings that are occupied by residents in receipt of a principal means tested benefit. Of these, 6,500 live in non decent homes. 9,500 dwellings have at least one resident with a long term illness or disability, of these 4,100 (44%) are unsteady on their feet.

The total cost to remedy category 1 hazards in Stockton-on-Tees is estimated at £16 million. The cost to make homes meet the Decent Homes Standard using a basic repair approach is £42million<sup>10</sup>.

### 3.5. The Impact on health and social care services

Increased illness due to cold and hot conditions has a significant impact on health services putting additional demand on local general practices, community services, hospitals, pharmacies, and other health services. The annual cost to the NHS of treating winter-related disease due to cold private housing is estimated at over £850 million<sup>11</sup>. This does not include the additional spending by social services, or economic losses through missed work. The Department of Health estimates that for every one excess winter death there are eight extra hospital admissions4. This means that in Stockton-on-Tees there approximately 584 additional emergency hospital admissions per year directly associated with excess winter deaths with an associated annual cost predicted at over £1 million. A report commissioned by Save the Children identified that for every £1 spent on fuel poverty initiatives, the health service saved 42p, with 41% of the saving related to physical conditions associated with excess cold, and 24% to mental health<sup>12</sup>.

There is also an associated increase in demand for social care services, where people cannot stay warm in their own homes they are often admitted to residential care, resulting in a loss of independence and significant financial implications.

The Building Research Establishment has developed a cost calculator that predicts the cost of ill health to the NHS caused by poor housing conditions. The table provides a summary of the costs of cold homes in Stockton-on-Tees<sup>13</sup>, predicting the number of events likely to occur within Stockton over a 12 month period which will lead to the NHS providing treatment, the cost of that treatment, the cost of remedying the hazards and the amount of time it will take to payback the investment.

Housing Health and Safety Rating System (HHSRS)Hazard	Class of harm	Dwellings affected	Cost to HNS	Cost of works
Excess cold	Extreme	66	£3,300,000	£329,538
	Severe	10	£200,000	£49,930
	Serious	45	£67,500	£224,685
	Moderate	89	£8,900	£444,377
Total		210	£3,576,400	£1,048,530
Payback period (years)				0.3

It is predicted that an investment of just over one million pounds would save the NHS just over £3.5 million with the payback period being just under 4 months.

Similarly, the model can be used to determine the costs to the NHS for other HHSRS hazards found in the home. For example 'Falls on the Stairs' and 'Falls on the Level' are the most frequently occurring hazards after 'Excess Cold' in Stockton. With a hip fracture costing the NHS approximately £29,000 to treat it is not surprising that an investment of only £217,000 per year to prevent trips and falls in the home could save the NHS approximately £1,600,000 per annum with a payback period of less than one month.

### 3.6. The national context

The Cold Weather Plan for England<sup>14</sup>, aims to prepare for, alert people to and prevent the major avoidable effects of winter on people's health. The plan recommends a series of steps to minimise the health impact of severe winter weather, to be taken by; the NHS, social care and other public agencies; professionals working with people at risk; and individuals and local communities. The Warm Homes, Healthy People Fund was also established by the Department of Health for the winter of 2011/12. This fund provided £153,000 to Stockton-on-Tees Borough Council to establish the Warm Homes Healthy People Project.

The Cold Weather Plan for England is part of a wider suite of measures that the Department of Health is taking to protect individuals and communities from the effects of severe winter weather and ensure continuity of services. It is also linked to the annual seasonal influenza vaccination programme and the 'Keep Warm Keep Well' campaign, as well as wider work on winter pressures and resilience which takes place in the NHS over the winter months. A UK priority has also been on tackling excess winter deaths through tackling fuel poverty and raising incomes.

The Department of Health produce an annual Heatwave Plan. The Heatwave plan 2012 recommends that:

'The health sector continue to work in partnership with local authorities and social care services to identify vulnerable populations and geographical areas to target long-term planning and interventions during a heatwave'7.

A Heat-Health Watch system operates from 1st June to 15<sup>th</sup> September, based on Met Office forecasts, which triggers levels of response from the Department of Health and other bodies. There are 4 levels of warning as described in appendix 4.

### Fuel poverty, affordable warmth and housing

There is evidence to indicate that fuel debt is increasing. From December 2008 to December 2009 some energy companies saw their numbers of customers in debt go up by as much as 45%. In this same period the average level of debt increased by 20% and the number of people with debts over £600 increased by 18%. The Citizens Advice Bureaux in England and Wales have also recorded fuel debt enquiries increasing by a third. Several national policies to alleviate fuel poverty by raising incomes and increasing home energy efficiency have been put in place.

The Warm Homes and Energy Conservation Act 2000, supplemented by the UK Fuel Poverty Strategy, requires the government to eradicate fuel poverty for all vulnerable households in England by 2010 and for all households in England by 2016. The primary objective has failed and the 2016 target is now unlikely to be met without major changes to policy with meaningful additional resources and programmes.

In 1991 the Government introduced Warm Front to provide grants to householders in receipt of certain means-tested or disability benefits to make energy efficiency improvements. Along with the Winter Fuel Payment this remains the main plank of central government's fuel poverty alleviation programme; although other initiatives have also been introduced over the years:-

**Home Energy Conservation Act (HECA) -** gives all local authorities the statutory duty to improve the energy efficiency of their housing stock.

**Carbon Emissions Reduction Target (CERT) -** requires energy suppliers to fund energy efficiency improvements – 40% of funds must be targeted at vulnerable households.

**Community Energy Saving Programme (CESP)**- Government initiative that installs energy efficiency improvements to houses in low income areas.

The CERT, CESP and Warm Front initiatives come to an end in 2013 and will be replaced by **Green Deal**, a Government backed 'pay as you save' loan scheme which also will include a mechanism (Energy Company Obligation) whereby the poorest households will be able to benefit.

A full description of these initiatives can be found at appendix 5.

# 4. Interventions to improve seasonal health and wellbeing

Evidence based approaches to reduce an individual's risk of seasonal death and illness and improve their resilience include:



### 4.1. Reducing Fuel Poverty: Creating Affordable Warmth

Affordable warmth is generally described as being able to keep your home adequately warm and when households are unable to do this they are described as being in fuel poverty. The current fuel poverty indicator states that fuel poverty occurs when a householder is unable to heat their home to the level required for health and comfort. The most widely accepted definition of a 'fuel poor' household is one that needs to spend more than 10% of its income on fuel to heat its home to an adequate standard for warmth. The temperatures recommended by the World Health Organisation are 21°C in the living room and 18°C in other occupied rooms. Fuel Poverty is caused by a combination of factors including low household income, homes with poor energy efficiency, under occupancy and fuel prices.

The definition of fuel poverty has recently come under review by Professor Hills in his recent report<sup>15</sup>. The recommendations from the report state that the Government should change its approach to measuring fuel poverty and is proposing a new definition – which considers both the extent and depth of fuel poverty experienced by a household. Further details can be found in appendix 6.

Fuel poverty affects some groups more than others:

- pensioners
- those who are disabled or have long-term illnesses
- the unemployed
- households with young children
- private tenants

• those living in older properties

Those experiencing fuel poverty are also unlikely to have the money to invest in energy efficiency measures or improved heating systems. Addressing fuel poverty is a central aim of this strategy and alongside energy inefficient housing the main cause of fuel poverty is income poverty. Measures to maximise income must be implemented, particularly at a time when welfare benefits are due to fall in real terms.

#### What are we doing in Stockton-on-Tees

Thelocal Citizens' Advice Bureau – Stockton and District Advice and Information Service (SDAIS) have reported local evidence of rising levels of fuel poverty in Stockton and have witnessed a significant rise in the number of clients contacting them for debt advice and fuel debt advice over the past few years.



SDAIS – Debt Advice Enquiries

SDAIS - Fuel Debt Advice



From their respective lows in 2001 and 2003 domestic gas and electricity prices in 2011 have risen by 168% and 83%<sup>1</sup>. The energy regulator Ofgem predicts that prices will rise by a further 25% by 2020, although there may be spikes of up to 60%.

In addition to improving the energy efficiency of homes the other main way of alleviating fuel poverty is to increase the householder's ability to pay. The government provides a number of payments to particular groups aimed at alleviating fuel costs, including:

- The Winter Fuel Payment
- Warm Homes Discount
- Social tariffs
- Energy trust funds.

Full details can be found in appendix 5.

Unfortunately the people most affected by fuel poverty are often those who are least able to access this type of help, to address this there are many agencies currently delivering projects to help people access fuel debt advice and maximise their incomes. Even a small uplift in monthly income as a result of welfare benefits advice,together with fuel supplier switching or applications to social tariffs and energy grants can successfully lift people out of fuel poverty. Several agencies provide this type of help in Stockton-on-Tees. Services available include:

- 1 to 1 fuel debt advice
- Welfare Benefit advice
- Housing Advice
- Specialist Debt Advice
- Financial Capability Training.
- Fuel supplier switching advice
- Help with energy grant applications
- Affordable Loan Schemes
- Links and onward referrals to other agencies

### 4.2. Housing Improvements

### Energy efficiency measures

The 2011 Fuel Poverty Report draws a direct parallel between energy efficient homes and the reduction in fuel poverty. Between 2004 and 2009 the North East in particular showed a large increase in the number of houses with cavity wall insulation (rising from 43% to 70%) and loft insulation (rising from 39% to 60%), which has helped to reduce fuel poverty in the region. There are a number of schemes which aim to improve the energy efficiency of housing in Stockton-on-Tees, these include:

<sup>&</sup>lt;sup>1</sup> DECC Average Annual Domestic Electricity Bills by Home and Non-Home supplier (avg direct debit tariff). DECC Average Annual Domestic Gas Bills by Home and Non-Home supplier (avg direct debit tariff)

### **Stockton Warm Zone**

The Warm Zone Initiative started in Stockton-on-Tees in 2001 and ran until 2004. During that time, an average of £485 was spent for every household assisted in Stockton and around 15,000 properties in the borough benefited from energy efficiency measures through the Warm Zone Initiative.

#### Stockton Comfort Zone

At the end of the Warm Zone Initiative period, Stockton transferred Warm Zone activities to the Comfort Zone Initiative, embedded within the Authority's general activities. This initiative is in partnership with NHS Tees and delivers services from a much smaller budget to assist families who meet the access criteria who are in fuel poverty to heat their homes.

- In 2009/10 Comfort Zone helped 9 families at a total cost of £5,000
- In 2010/11 Comfort Zone helped 10 families at a total cost of £10,000

### **CERT** partnership working

Stockton-on-Tees Borough Council has worked in partnership with Community Interest Company Go Warmto install free cavity wall and loft insulation to householders on certain benefits under the CERT provision. From 2008 to 2010, over 4,800 installations have taken place in Stockton, with 3,431 of these in private sector housing and 1,391 in Council housing (pre-stock transfer).

### **Community Energy Saving Programme Schemes**

GoWarm Parkfield is a CESP initiative being delivered in the Parkfield area of Stockton where around 1000 private homes willbenefit from improved energy efficiency measures thanks to £3.85m of investment by the energy industry. The scheme is offering a package of energy efficiency measures free of charge to households which will make homes warmer, more comfortable and should remove many families from fuel poverty. Households should save up to £775 on fuel bills.

#### **Enforcement and financial assistance**

Action to remedy poor housing conditions in the private rented sector – enforcement action can be taken under a range of statutory powers to improve poor housing that can affect the health and well being of the occupying tenants. If the property owner fails to comply with formal statutory notices requiring the undertaking of specified works to remedy poor conditions, the Council can and will take action to carry out the works in default of the owner so that the property is improved and any risks to the tenant's health and well being are removed.

Financial Assistance is offered to vulnerable home owners in the form of a loan to cover the costs of renovation and improvement works. On the completion of the works the property must meet the Government's Decent Homes Standard. This includes the elimination of Category 1 hazards – for example - removal of excess cold by the provision of suitable and sufficient heating systems, removal of rising dampness by the provision of a damp proof course and the reduction of falls on the level by replacing damaged and uneven floorboards.

### 4.3. A targeted, multi-agency approach

The Health Inequalities National Support Team has identified that many Seasonal Excess Deaths are preventable and that systematic action is required to help reduce inequalities and meet life expectancy targets. A three stage process is recommended whereby organisations work together to:

- 1. Understand the issue, plan, agree joint working arrangements and coordinate a systematic approach across organisations
- 2. Work in partnership to identify vulnerable people
- 3. Systematically offer tailored packages of interventions to vulnerable individuals.

### Stockton-on-TeesWarm Homes Healthy People Project

The project is a partnership approach across the Council, health, and voluntary and community sectors to increase people's resilience during the winter months and reduce EWDs. The project has four main components.

- 1. Systematically identifying and targeting those at risk A tool was developed using Council, health and fire service data to identify 'cold spots' where the population are most likely to be susceptible to EWDs.
- 2. Providing a package of interventions Individual's needs are assessed and they are offered a tailored package of evidence based interventions, including:
  - Handyman service draught proofing, energy efficiency inspections and measures to reduce risk of falls
  - Boiler servicing and repair
  - Energy, fuel debt and benefits advice
  - Volunteer 'buddying' service
  - Assistive technologies Including temperature sensors and emergency assistance
  - Home insulation and affordable warmth interventions
  - Identification and remedying of Category 1 Hazards in the home
  - Emergency crisis interventions delivered by the Fire Brigade.
  - Onward referral to encourage uptake of:
    - Flu and pneumococcal vaccine
    - Medicine Use Reviews
    - Healthy lifestyle support. E.g. stop smoking, sensible drinking, healthy eating, adequate hydration and daily active living
    - Falls assessments.
- 3. Awareness raising and developing local champions across the voluntary and community sector and statutory bodies to ensure that frontline staff make the most out of every client contact, identifying risk factors and making appropriate referrals for support. A local media campaigns have also been undertaken to raise awareness with the public about available support and how to keep safe and healthy during the winter months.
- Central point of contact, coordination, referral routes, follow-up and monitoring

   A central contact centre has been established to ensure that individuals
   receive seamless referrals, support and follow up.

### 4.4. Influenza and pneumonia vaccinations

The Tees Seasonal Flu Steering Group is a multi-agency group with the responsibility for implementing and overseeing actions to increase the uptake of flu vaccinations in Stockton-on-Tees. These actions span across a wide range of agencies including GP practices, care homes, community services and community pharmacies. Progress on the Tees flu action plan will contribute significantly to delivery on this strategy and updates will be provided to the Stockton-on-Tees Health and Wellbeing Board.

### 4.5. Healthy lifestyle interventions

Encouraging people to adopt healthy lifestyles can help them to increase their resilience to deal with extreme temperatures and improve their health and wellbeing. A wide range of evidence based healthy lifestyle services are commissioned and provided in Stockton-on-Tees including services to support people to:

- Stop smoking
- Drink sensibly
- Manage their weight and eat healthily
- Increase their physical activity levels
- Improve their mental health and wellbeing

Falls prevention: Significant work has been undertaken in Stockton-on-Tees to ensure that individuals at risk of falls are identified and receive appropriate onward referrals. Dedicated falls prevention services are provided by the falls team from North Tees and Hartlepool Foundation Trust, who provide falls assessments, evidence based interventions to reduce an individual's risk of falls and onward referrals where necessary. A North of Tees Falls Action Plan is in place which identifies a range of action to help prevent falls and progress on this will contribute to this strategy.

Assistive technologies including Telecare and temperature sensors are helping to ensure that alerts are raised and appropriate action is taken if vulnerable individuals are at risk or require help.

### 4.6. Improved management of long term conditions

Those people with underlying health conditions are most susceptible to the effects of cold and heat. The Department of Health is currently working with other government departments to develop a strategy on long term conditions. The aim is to provide a clear direction and vision of how services can work together to; help prevent or delay long term conditions where possible; and improve quality of life and independence for people with long term conditions.

For many years there have been a number of programmes in Stockton-on-Tees that have focused on improving the management of long term conditions. Activities and actions include personalised care planning, provision of high quality information and support including self care support, the provision of high quality evidence based services and ensuring effective joint working across organisations.

# 5. Opportunities for development and next steps

### In delivering this strategy we will work to:

- Reduce seasonal deaths and illness and increase resilience to the effects of cold and hot weather
- Tackle health inequalities in Stockton-on-Tees
- Improve the housing stock in Stockton-on-Tees
- Achieve safer, better insulated homes (warmer in winter and cooler in summer)
- Tackle debt and fuel poverty
- Support older people to live at home for longer
- Support carbon reduction targets.

### An Action Plan will be developed and implemented to achieve the aims set out in this strategy. The action plan will be focused on the following areas:

- Identification of vulnerable individuals, targeting, evidence based interventions, communication and publicity
- Reducing Influenza and Pneumonia
- Reducing Falls and Fall Related Injury
- Increasing Resilience and Promoting Healthier Lifestyles
- Affordable warmth and reducing fuel poverty

We will bring together a range of partners from across Stockton Borough Council, the NHS, health and care providers and voluntary and community sector to develop and deliver the local action plans. The Environment Select Committee are currently undertaking a detailed review of affordable warmth and fuel poverty and will produce recommendations which will inform an action plan for this area.

### Some of the key areas that will be included within the action plan include:

- 1. Ensure that all relevant partners are represented and engaged.
- 2. Work to deliver the recommendations of the Health Inequalities National Support Team.
- 3. Build on the Stockton-on-Tees Warm Homes Healthy People Project to ensure that all vulnerable residents are identified, referred and systematically offered interventions.
- 4. Expand and enhance the interventions available to improve seasonal health and wellbeing.
- 5. Build on our successful work on affordable warmth, targeting and adapting it to improve seasonal health and wellbeing.
- 6. Engage with and support local delivery on national fuel poverty and energy efficiency schemes.
- 7. Promote both behavioural and building management measures to reduce the impact of extreme temperatures on vulnerable residents.
- 8. Target resources at improving the homes of the most vulnerable.
- 9. Ensure that advice and support is available to help reduce fuel poverty and assist our population with fuel debt.
- 10. Develop our knowledge and evidence base to help us target resources appropriately.

# 6. Appendices





The excess winter death (EWD) index for Stockton-on-Tees has largely followed the national and regional trends. Over the past decade the EWD Index for Stockton-on-Tees has seen only limited improvement.



Excess Winter Deaths and susceptibility to the cold does not equally affect all communities. The map above provides an overview of the differing EWD rates across Stockton-on-Tees.



The graph above provides a comparison of excess winter deaths by local authority and broken down by age group.

The table below shows the number and percentage of patients registered with a GP practice in Stockton-on-Tees who received a seasonal flu vaccination in 2011/12.

Flu - at risk group	Patients registered	No. vaccinated	% uptake	Target
65 years and over	31,227	23,016	73.5%	70%
At risk under 65 years	20,667	9,967	48%	65%

The table below shows the rate of emergency admissions per 1000 for conditions that have been shown to be related to cold weather. There are significant variations across the wards in Stockton-on-Tees, with some correlation with areas of deprivation. This data has been used to help target interventions to improve seasonal health.

Ward	COPD (admission rate per 1000)	Asthma (admission rate per 1000)	Flu & Pneumonia (admission rate per 1000)	Fall related injury (admission rate per 1000)
Billingham Central	5.16	3.91	3.85	9.58
Billingham East	6.37	6.62	4.73	9.84
Billingham North	6.01	5.36	4.73	6.98
Billingham South	9.32	5.00	3.50	7.53
Billingham West	6.17	6.30	3.54	7.64
Bishopsgarth & Elm	4.63	3.94	4.10	7.53

Tree				
Eaglescliffe	4.67	4.12	3.00	7.53
Fairfield	5.52	3.70	3.75	10.27
Grangefield	4.52	3.51	3.10	8.30
Hardwick	3.58	4.01	4.22	10.34
Hartburn	3.39	4.62	3.54	8.04
Ingleby Barwick East	5.21	4.10	3.40	4.11
Ingleby Barwick West	1.82	1.82	2.01	6.16
Mandale and Victoria	9.30	6.15	4.72	9.53
Newtown	5.08	3.67	4.42	8.08
Northern Parishes	2.68	2.72	2.20	8.33
Norton North	11.28	9.51	3.54	8.04
Norton South	5.28	5.39	4.24	11.01
Norton West	4.07	4.58	3.14	8.13
Parkfield and Oxbridge	9.30	6.41	3.76	10.01
Roseworth	12.42	7.69	4.40	8.90
Stainsby Hill	5.47	4.26	5.31	8.97
Stockton Town Centre	5.90	5.30	4.83	12.05
Village	3.81	3.54	3.96	8.56
Western Parishes	4.01	3.98	4.25	5.02
Yarm	2.56	2.55	3.85	6.75

### Appendix 2: Impact of cold weather on health and wellbeing

### Cardio-vascular disease

• The cold can cause constriction in the blood vessels, resulting in a rise in blood pressure. The thickening of the blood further increases the risk of clots. If these clots form in the blood vessels of the heart and brain they can cause heart attacks and strokes.

### Respiratory Illness

- The cold lowers resistance to respiratory infections, constricts airways and stimulates mucus production.
- Coldness impairs lung function and can exacerbate or trigger broncho-constriction in patients with asthma and COPD.
- If a house is damp as well as cold, then mould growth will be promoted further increasing the risk of respiratory infections. Most cases of influenza and pneumonia tend to occur in the winter months.

### Falls and injuries

- Symptoms of arthritis become worse in cold, damp houses.
- Strength and suppleness decrease as temperatures drop, increasing the risk of non-intentional injuries and falls, particularly in older people
- Snow and ice increase the risk of trips and falls outdoors.

### Other illnesses

- Cases of several bacterial infections, viral gastroenteritis, hypothermia and several other illnesses increase in the winter.
- The choice between 'heat or eat' may often result in poor diet which in turn can cause a range of illnesses including cancers, strokes and heart disease.
- Cases of carbon monoxide poisoning also increase in the winter months.

### Mental and social health

- Damp, cold housing is associated with an increase in mental health problems, particularly depression and anxiety.
- Some people become socially isolated as they are reluctant to invite friends into a cold house.
- Ill health can lead to absences from work and inadequate warmth results in longer recovery times.
- More than 1 in 4 adolescents living in cold housing are at risk of developing mental health problems, compared to 1 in 20 who have always lived in warm housing4.
- Adverse effects on children's education and future employment opportunities. One study showed that home energy improvements reduced school sickness absences by 80% in children with asthma or recurrent respiratory infections<sup>16</sup>.

### Appendix 3: Extremes of hot weather, overheating and heat related illnesses

Overheating Analysis of Stockton-on-Tees Housing Stock - As part of the Economic Impacts of Climate Change for the North East study (2010) Arup worked with Stockton Borough Council.

A three bedroom, mid-terrace property was developed as the model home for the study. This was based on typical housing stock prevalent in areas within Stockton with a high Index of Multiple Deprivation (IMD).

The initial findings demonstrate that, based on an 'extreme' summer weather year (actual 1995 Met Office data), comfort thresholds based on the UK Heat wave plan (28 °C during the day time, 15°C during the night) are already significantly exceeded in some south facing properties, depending upon their occupancy profiles.

Results of the modelling showed that increasing ventilation by opening windows etc. was only partially successful with some overheating remaining in bedrooms. It is only when combined adaptive measures of external shutters and open windows are applied to all rooms that there is no overheating recorded in the home.

### **Specific Heat Related Illnesses**

*Heat cramps*- caused by dehydration and loss of electrolytes, often following exercise.

Heat rash- small, red, itchy papules.

Heat oedema- mainly in the ankles, due to vasodilation and retention of fluid.

*Heat syncope* dizziness and fainting, due to dehydration, vasodilation, cardiovascular disease and certain medications.

*Heat exhaustion*— is more common. It occurs as a result of water or sodium depletion, with non-specific features of malaise, vomiting and circulatory collapse, and is present when the core temperature is between 37°C and 40°C. Left untreated, heat exhaustion may evolve into heatstroke.

*Heatstroke* – can become a point of no return whereby the body's thermoregulation mechanism fails. This leads to a medical emergency, with symptoms of confusion; disorientation; convulsions; unconsciousness; hot dry skin; and core body temperature exceeding 40°C for between 45 minutes and eight hours. It can result in cell death, organ failure, brain damage or death. Heatstroke can be either classical or exertional (e.g. in athletes).

### Appendix 4: Heat Health Watch – levels of preparedness

#### Level 1: Summer preparedness and long-term planning

During the summer months, social and healthcare services need to ensure that awareness and background preparedness are maintained by the measures set out in the Heatwave Plan. Long-term planning includes year-round joint working to reduce the impact of climate change and ensure maximum adaptation to reduce harm from heatwaves. This involves influencing urban planning to keep housing, workplaces, transport systems and the built environment cool and energy efficient.

### Level 2: Alert and readiness

This is triggered as soon as the Met Office forecasts that there is a 60 per cent chance of temperatures being high enough on at least two consecutive days to have significant effects on health. This will normally occur 2–3 days before the event is expected. As death rates rise soon after temperature increases, with many deaths occurring in the first two days, this is an important stage to ensure readiness and swift action to reduce harm from a potential heatwave.

### Level 3: Heatwave action

This is triggered as soon as the Met Office confirms that threshold temperatures have been reached in any one region or more. This stage requires specific actions targeted at high-risk groups.

#### Level 4: Emergency

This is reached when a heatwave is so severe and/or prolonged that its effects extend outside health and social care, such as power or water shortages, and/or where the integrity of health and social care systems is threatened. At this level, illness and death may occur

### Appendix 5:National fuel poverty and affordable warmth initiatives

**Carbon Emissions Reduction Target (CERT):** Introduced in 2002, requiring energy suppliers to fund energy efficiency improvements. 40% must be spent on vulnerable households, defined here as those with members aged over 70 or who are on meanstested or disability benefits. Vulnerable households (defined as those who are: of pensionable age; disabled: chronically sick; deaf or hearing impaired or blind or visually impaired) are entitled to join their energy supplier's Priority Services Register. This provides assistance such as meter readings, special assistance in the event of interruption of supply and adaptors to allow them use appliances.

**Home Energy Conservation Act (HECA):** gave all local authorities the statutory duty to improve the energy efficiency of their housing stock by 30% by 2012 and asked for reporting against an action plan to monitor progress towards this target.

**Community Energy Saving Programme (CESP):** a Government initiative that targets low income areas (as identified by the Income Domain of the Indices of Multiple Deprivation). To qualify projects must be focused on providing a bespoke package of energy efficient measures tailored to the needs of individual properties.

All these initiatives will come to an end in 2013 and will be replaced by **Green Deal**, a Government backed scheme giving home owners the opportunity to make energy efficiency improvements to their homes by utilizing a 'pay as you save' loan scheme. An element of Green Deal – will consist of the **Energy Company Obligation (ECO)** which will enable the poorest households to benefit from the scheme.

**Winter Fuel Payment:** paid annually to everyone over 60 without means-testing. Householders between 60 and 79 received £200 in 2011/12, whilst householders aged 80 or above received £300. The Cold Weather Payment of £25 per qualifying week, is payable to households in receipt of certain benefits when the average temperature in their postcode area is recorded as, or forecast to be, below 0°C for seven consecutive days between November and March.

**Warm Home Discount:** the schemeis a four-year program that runs from April 2011 to March 2015 offering support with energy costs to low-income vulnerable households. All of the main energy suppliers are required to participate in the scheme by providing discounts on electricity bills for eligible households.

**Social tariff**: offered by each of the main energy suppliers to vulnerable customers. Customers have to actively apply for these schemes. The exact offer and eligibility criteria vary with the supplier however they typically include a discounted tariff or one equivalent to the lowest tariff that company offers.

**Trust funds:** some of the main energy suppliers operate their own trust funds, allowing their customers to apply for grants to pay off fuel debt. Those on certain means-tested benefits in debt with their energy supplier may opt to take advantage of the Fuel Direct Scheme, where money to cover debt and current fuel use is taken directly from benefits each week.

### Appendix 6: Fuel poverty definitions

The Hills Fuel Poverty Review concluded that the existing definition of fuel poverty can be improved by introducing two basic criteria <u>both</u> of which must be met if a household is to be categorised as fuel poor:

- Low household income
- High energy cost

### Low household income

Low income should be defined by adopting and adjusting the generally accepted definition of poverty used in the UK;

# A household is in financial poverty where its equivalised<sup>2</sup> income is less than 60% of median equivalised household income after housing costs.

### **High Energy Costs**

High required energy expenditure is defined in relation to what might be considered reasonable.

High energy costs are defined as the need to spend more on space and water heating and other energy services that the median figure for that specific household type. Needed spend is the median figure for all households adjusted for household size using equivalisation.

<sup>&</sup>lt;sup>21</sup> In order to reflect differences in a household's size the total household income is divided by the number of 'equivalent adults' using a standard scale.

## 7. References

<sup>1</sup> Office for National Statistics

<sup>2</sup>Department of Health National Support Team. (2010), How to reduce the risk of seasonal excess deaths systematically in vulnerable older people to impact at population level.

<sup>3</sup> Stockton-on-Tees Joint Strategic Needs Assessment. <u>http://www.teesjsna.org.uk/</u>

<sup>4</sup>Department of Health. (2011), Cold Weather plan for England. Making the Case: Why cold weather planning is essential to health and well-being.

<sup>5</sup> Collins, K.J. (1983), Hypothermia – the facts, Oxford University Press.

<sup>6</sup> Health Compendium of North East England Housing and Population Data Version 3. Updated March 2009

<sup>7</sup>Department of Health. (2011), Heat Wave Plan for England.

<sup>8</sup> Health Protection Agency. (2006), Rapid Evaluation of the 2006 Heatwave

<sup>9</sup> Department of Energy and Climate Change (DECC). (2011), Fuel Poverty Report

<sup>10</sup> Stockton-on-Tees stock condition survey. (2009).

<sup>11</sup> Department of Health. (2010), 'Winter kills', in 2009 Annual report of the Chief Medical Officer, 31-7.

<sup>12</sup> Liddell, C. (2008), Estimating the impacts of Northern Ireland's warm homes scheme 2000-2008. Ulster University.

<sup>13</sup> 2009 House Condition Survey & BRE/CIEH Toolkit.

<sup>14</sup>Department of Health. (2011), Cold Weather plan for England.

<sup>15</sup> Professor Hills., J. (2012), Getting the Measure of Fuel Poverty. DECC

<sup>16</sup>Department of Health, South East Regional Public Health Group. (2009), Fact Sheet: Health and Winter Warmth – Reducing Health Inequalities.