

Newcastle JSNA - Excess Seasonal Mortality December 2008

What do we know?

Facts and figures

It is widely recognized that excess winter mortality continues to be an important public health problem in the North of Tyne Primary Care Organisation localities with around 40% of excess deaths from cardiovascular disease (CVD) and a third from respiratory disease, in particular Chronic Obstructive Pulmonary Disease (COPD).

It is possible to predict when excess deaths occur after a cold snap: heart attacks after 2 days, strokes after 5 days and respiratory disease after 12 days.

This seasonal fluctuation

- is greatest for *cardiovascular* and *respiratory* mortality
- is larger in Britain than in many other countries in Europe and Scandinavia
- can, to a large degree, be explained by changes in ambient temperature
- may also in part be due to seasonal fluctuations in respiratory infection, behavioral patterns, air pollution level and micro-nutrient intake
- There were 23,900 excess winter deaths in England and Wales in 2006/07
- Between 1991 and 2007 there was an average of 31,253 excess winter deaths in England and Wales
- There were 1,500 excess winter deaths in the North East in 2006/07
- Between 1991 and 2007 there was an average of 1,685 excess winter deaths in the North East
- While 2006/2007 saw a decrease in excess winter mortality in the UK as a whole, The North East excess winter mortality rates increased
- Newcastle has the highest level of excess seasonal mortality in the North of Tyne area
- Newcastle has significantly higher number of people who die between 65-74 years old than the other Primary Care Organisations
- Excess winter mortality is potentially preventable, with much higher levels in Britain than in most other European countries, including ones with much colder winters such as Norway and Russia.

- Links between poor quality housing, fuel poverty and health are widely recognized and a study of the health of people before and after receiving insulation and heating measures under the Government's Warm Front scheme, showed some important relationships between improving the affordable warmth of households and the individual householder's health.
- Affordable warmth increases life expectancy and reduces inequalities in health; improves householder's mental health and well being; improves children's educational achievements and school attendance, and reduces the incidence of childhood asthma; promotes social well-being and independent living, with older people able to use the whole house following central heating installation. This potentially reduces/delays admission to hospitals and care homes.

Trends

During the period 2000-2007 the number of deaths across the North of Tyne Primary Care Organisations area varied widely with North Tyneside recording the lowest number of deaths at 684, Northumberland recording 1094 excess winter deaths and Newcastle recorded the *highest* number of deaths at 1194.

The proportion of excess winter deaths is greater in older age groups but excess winter mortality affects all ages. Those most at health risk from living in a cold, damp home (the elderly, especially those aged over 75), who are also more likely to have poorer levels of heating and insulation.

When scrutinizing unplanned emergency admissions for COPD, during one year Newcastle had the following :

Age band	0-65 years	66-75 years	76-85 years	Over 85 years
Number of unplanned emergency admissions for COPD or other respiratory conditions	549	571	662	240

The sources of referral varied across the three PCOs with *Newcastle seeing the highest number of referrals from GPs at 34.1%* compared to 6.1% in North Tyneside and 3.0% in Northumberland. The highest percentage of referrals for emergency admission were via A&E services with 57.8% in Newcastle, 91.2% in North Tyneside and 95.7% in Northumberland.

Research has indicated that for *every 1 °C fall in temperature below 18 °C*, there is a *1½% rise in excess winter deaths*

During cold snaps, **for every 1 °C fall in temperature below 5 °C** there is, on average, **10½% increase in primary care respiratory consultations amongst the elderly.**

Targets

The national health inequalities target - Life expectancy

Starting with Local Authorities, by 2010 to reduce by at least 10% the life expectancy gap between the fifth of areas with the worst health and deprivation indicators and the population as a whole (from 1995-97 baseline).

The Newcastle Partnerships Local Area Agreement 2008 – 2011 contains the following health inequalities target:

LAA Priority objectives	Measured by	Baseline	2008/09 target	2009/10 target	2010/11 target
Tackling health inequalities	NI 120 All-age all cause mortality rate (*35 target LAA)	Male: 857.9 (2004-06)	Male: 757 per 100,000	Male: 729 per 100,000	Male: 701 per 100,000

The Decent Homes Standard is the current measure by which homes are rated. The regulations set out an aim to ensure that all social housing meets standards of decency by 2010, and has extended the target to include a minimum of 70% of private households also meeting the standards

The World Health Organization has a target of 75% uptake in those aged 65 years. Whilst this target is now being exceeded, a further improvement is required in the uptake of under 65 clinical risk groups such as carers and health care workers.

Performance

Decent Homes Standard

The Local Authority has an ongoing programme of work to address the target and considerable progress has been made over the past two years.

Total Properties at start of 2007/08 (as at 01/04/2007)	30475	100%
No of Properties Decent by end March 2008	9795	32%
No of Properties NON - Decent at end March 2008	20680	68%

	Winter 2006	Winter 2007
	Over 65s At risk	Over 65s At Risk

Flu Immunisation

Newcastle PCT	77%	46%	77%	49%
England	74%	42%	74%	45%

The annual flu campaign offers vaccination for older people and those with underlying health problems that put them at risk of complications from flu. Immunisation is highly effective in preventing illness and hospital admissions.

The Chief Medical Officer makes recommendations about who should receive the flu vaccination in July every year prior to the start of the campaign each autumn.

- The overall uptake rate was maintained at 77% for those aged 65 years and over
- The uptake for at risk groups increased to 49%
- 3 Practices failed to achieve the national target of 70% >65s
- 25 out of 36 practices achieved an uptake of 75% or more, 9 of which achieved 80% or over.
- For PBC Clusters the uptake for >65s was West 77%, North and East 77%, Central 78% and Grainger medical 73%
- 4 poultry workers were vaccinated

Local Views

Each Primary Care Organisation area has robust mechanisms through they engage with communities, whether it is tenant forums or through the Ward Co-ordinators and Community Centre activities. The emphasis in the current NHS North of Tyne communications and involvement strategy, agreed in March 2008, is on reaching people at grass roots level by optimising existing channels of communication and involvement.

The Newcastle Community Empowerment Network maintains a network of Community Voices to give local people a say in the running of the city. This includes membership of the Newcastle Partnership Strategic Board and Delivery Partnerships.

National and local strategies

In June 2008, the Department of Health has published a document outlining progress and next steps for health inequalities. This outlines a new vision for health inequalities as follows:

“In a fair and prosperous society, everyone should have the same chance to lead a long and healthy life and enjoy the same opportunities for education, employment, recreation and fulfillment that good health brings.”

It describes actions over two timescales as follows:

- The period up to 2010 – focused on meeting the current targets and redoubling efforts to prevent avoidable deaths; and

- Beyond 2010 – developing new ambitions for health inequalities and the structure and systems that support delivery and sustainable improvements

This supports the current shift in focus to improving the quality of people's lives not just prolonging life itself and people living with long term conditions such coronary heart disease and chronic obstructive pulmonary disease would benefit from the continued work.

Given the current position in Newcastle with excess seasonal deaths we have a clear priority to prevent the avoidable deaths from heart disease and stroke in middle aged people.

Current Activity and Services

WarmZone Project

Newcastle Warm Zone (NWZ) is a not for profit partnership between Newcastle City Council, Your Homes Newcastle, National Grid, ScottishPower and others, including the PCT, total planned investment for the core energy efficiency improvement works is around £3.5 million.

NWZ aims to reduce fuel poverty and improve domestic energy efficiency as far as is practicable. In so doing the project aims to reduce health inequalities; improve social and economic inclusion and tackle climate change by reducing energy use.

In the first 4 years of its operation to 31 march 2008 it has achieved the following:

- Insulated over 27,000 homes;
- Distributed 280,000 energy efficient light bulbs;
- Installed 104 central heating systems and referred hundreds of others to partner schemes;
- Employed, trained and developed 94 previously unemployed people from the most deprived areas in Newcastle; and
- Secured £5 million p.a. in additional benefits gain.

The project has invested £8.5 million in home energy efficiency improvements.

This work has ensured that there are over 27,000 warmer and healthier homes and collectively increased household disposable incomes by £8million p.a.

NWZ will continue for a further 3 years to March 2011. It aims to insulate a further 10,000 homes and secure an additional £1.5 million in benefits gain. NWZ also intends to tackle 'hard to heat' homes, subject to funding. These

high level aims will be achieved by enhancing and broadening the existing partnership arrangements, including those in place with the PCT.

Newcastle PCT

The Trust will continue to invest in the Health & Housing Specialist Practitioner roles across the PCT and Newcastle Local Authority, working closely with our local authority partnerships to strengthen our activities and focus. Historically Newcastle has focused on health & housing issues and has developed strong partnership working across all relevant agencies.

What is this telling us?

What are the key inequalities?

To progress this work we need to understand the different elements which beneficially affect vulnerable individuals and families.

What are the key gaps in knowledge and services?

We want to delve deeper into the data which is now becoming available to us, try to establish some connective tissue between ward level activities and the perceived health needs of areas of the city. The aim of the work will be to highlight areas of the city which may need increased targeted work.

There are three main ways that we can help to ensure that fuel poor households, with specific health needs, that are eligible for assistance, receive help:

- Advice – Tie in advice on fuel poverty assistance with existing information provision, e.g. promotion of the NHS Keep Warm, Keep Well booklets, additional information included in flu jab mailings
- Awareness – Ensure that front line staff are up to date with problems facing householders and the help available to them, through training, which can be cascaded down to them in team meetings. This helps them identify the simplest way of ensuring a referral to the agencies that can help
- Referral pathways – Identify additional processes and opportunities which can be used to reduce health inequalities amongst vulnerable households e.g. using CAF (Common Assessment Framework) to pass details of vulnerable patients and families to agencies, who can identify what help may be available to them

Increasing Awareness

During the summer of 2008 it is envisaged that much work is needed to increase referrals into programmes and grants for improving warmth in the home via energy efficiency improvements. While it is not expected that health professionals should become experts on fuel poverty they are in a key position to act as a means to signpost potentially vulnerable individuals. There are plenty of opportunities to tie in local and national schemes, which

will undertake the necessary work to identify how best to assist the person as well as assess the level of urgency required, acting as an early warning mechanism to improve the quality of vulnerable people's lives.

Barriers and risks

Newcastle Warm Zone (NWZ) has a robust business plan and proven risk management capabilities although there are still challenging barriers and risks. The main barriers to delivering the targets over the next 3 years include: accessing sufficient homes to assess/survey and install measures; securing adequate revenue funding to meet staff and measures costs and securing the appropriate level of management and on the ground support from partners, including the PCT.

It is not compulsory to have loft insulation and cavity wall insulation, not everyone responds to flyers, adverts, mail shots etc.

The main risk identified is that we will be unable to demonstrate we have made a difference. The on going credit crunch will provide an increasingly challenging environment which will in all probability increase the numbers of 'at risk' or vulnerable individuals/families.

What is coming on the horizon?

The recent winter period has seen dramatic increases in gas and electricity costs for every household and almost certainly has increased the number of vulnerable households who are at risk of fuel poverty.

What should we be doing next?

1. Delve deeper into the data, try to establish some connective tissue between ward level activities and the perceived health needs of areas of the city
2. Support to fuel poor households with specific health needs:
3. Advice – Tie in advice on fuel poverty assistance with existing information provision, e.g. promotion of the NHS Keep Warm, Keep Well booklets, additional information included in flu jab mailings
4. Awareness – Ensure that front line staff are up to date with problems facing householders and the help available to them, through training, which can be cascaded down to them in team meetings. This helps them identify the simplest way of ensuring a referral to the agencies that can help
5. Referral pathways – Identify additional processes and opportunities which can be used to reduce health inequalities amongst vulnerable households e.g. using CAF (Common Assessment Framework) to pass details of vulnerable patients and families to agencies, who can identify what help may be available to them

