

## Excess mortality in Scotland and Glasgow

*New research, published by the Glasgow Centre for Population Health and NHS Health Scotland, in collaboration with the University of the West of Scotland and University College London, has identified the most likely underlying causes of Scotland's and Glasgow's levels of 'excess' mortality. This document summarises a series of commonly asked questions regarding this research.*

### Why is mortality higher in Scotland and Glasgow than in other parts of the UK?

A huge part of this explanation relates to higher levels of poverty and deprivation experienced by the Scottish population. The links between poverty and poor health are profound and extremely well evidenced. In Glasgow's case, the city has higher levels of deprivation than any other Scottish city, and also has higher levels of deprivation than most other UK cities.

At the same time, however, mortality is higher in Scotland compared with England & Wales, even when differences in deprivation have been taken into account. In Glasgow, mortality is much higher than would be expected for such levels of deprivation, and much higher than in similar post-industrial UK cities such as Liverpool and Manchester, which have comparable levels of poverty.

There is, therefore, an 'excess' level of mortality in Scotland and Glasgow, defined as higher mortality compared with elsewhere in Britain *over and above* that explained by socioeconomic deprivation. In Scotland as a whole, this accounts for an additional 5,000 deaths every single year.

### So what are the so-called 'Scottish effect' and 'Glasgow effect'?

These terms were originally coined to describe the excess levels of mortality in Scotland, as described above. However, they have been subsequently been replaced by the more accurate terminology of 'excess mortality'.

### So what are the causes of this excess level of mortality?

The causes are complex and multiple. There is not – and was never going to be – a simple explanation.

In Glasgow's case, the main finding is that the city's population made was *more vulnerable* to factors which impacted on health across the UK (e.g. poverty, deprivation, deindustrialisation, economic decisions taken at UK government level), consequently leading to poorer health than in other places which had similar experiences.

The city's population was made more vulnerable due to:

- high levels of deprivation and overcrowding over a long period of time
- urban planning decisions in the post-war decades (e.g. the creation of larger, relatively poor quality, peripheral housing estates)
- UK government Scottish Office regional economic policies in the 1950s-1970s
- local government responses to UK government policy in the 1980s.

There is also evidence of some 'protective factors' in Liverpool and Manchester which helped to reduce the adverse impact on health in those cities.

And there is a wide range of other, smaller factors which may come together to add to the excess, alongside recognition of the difficulties of capturing the 'lived experience' of deprivation in the standard deprivation measures currently used.

Because of geographical scale (i.e. given the large percentage of the Scottish population that live in and around Glasgow), many of the factors identified as underpinning the excess mortality in Glasgow are also relevant to the excess observed at the national level. In addition, a number of other vulnerabilities – related to, for example, other aspects of UK government Scottish Office regional economic planning – were identified as being linked to excess mortality in other parts of Scotland.

### **How have these causes been identified?**

The research is based on evidence, not speculation. Evidence relating to no fewer than 40 proposed explanations for excess mortality was examined. From this exhaustive process, the underlying causes outlined above were identified.

### **Is there consensus regarding these causes?**

The research has been shared with a large number of experts in public health and other relevant disciplines who have endorsed the report's findings, and are 'signatories' to the report.

### **Why are political decisions important for health? Surely issues like smoking, drinking, diet etc. are more relevant?**

Health behaviours are clearly extremely important in shaping an individual's health status. However, we know from international research that evidence peoples' behaviours are strongly influenced by the environments (social, economic, physical) in which they live. Indeed, for that reason, research studies investigating excess mortality in Scotland have shown that the excess persists even when such behaviours are taken into account.

Political decisions are paramount as they create the environments (social, economic, physical) which ultimately help to develop good or bad health in populations.

### **Why have local government policies in the 1980s been highlighted in the report?**

Political decisions at different levels of government are relevant to population health. As the report makes clear, there is considerable evidence that the historical decisions taken in Glasgow, Liverpool and Manchester had different impacts on their respective populations. In Liverpool in the 1980s, the responses taken to dealing with some of the important issues of the day – addressing poverty, building better quality, affordable council houses – had a more positive effect on health than was the case in Glasgow.

There is also ample evidence that historical local government processes in Liverpool helped to nurture specific protective factors in the population. These relate in part to the participation and politicisation of the public, linked to greater levels of so-called ‘social capital’, which is known to be beneficial for population health.

### **If government policy is important, surely the role of national devolved government is also relevant? Has that played a part in the excess?**

The report addresses this point, highlighting the relevance of current devolved powers – e.g. urban policy and planning, housing, local government funding – to important health determinants. However, powers were devolved to Scotland relatively recently (in 1999) and the assessment of all the available evidence does not suggest that the excess is a consequence of factors that have come into play in the relatively short term, but rather relate more to some of the historical processes described above (and in the report). Nonetheless the report makes clear that Scottish Government policy will become an increasingly important factor in understanding future trends in Scottish excess mortality, especially given the devolution of further powers to the Scottish Parliament.

### **If the excess is defined as higher mortality over and above that explained by differences in deprivation, and if one component of the explanation is the inadequate measurement of deprivation, does that mean that there isn't really an excess?**

Poverty and deprivation are measured using a range of statistical indicators. These include both individual and area-based measures. In a wide range of studies, an excess level of mortality has been observed in both Scotland and Glasgow regardless of what measures of deprivation have been used in the analyses. In this sense, therefore, there is, and there remains, a high level of excess mortality (and indeed, the excess defined in these terms is increasing over time). However, the report argues that there are differences in the so-called ‘lived experience’ of poverty and deprivation in Scotland and Glasgow (compared with elsewhere in Britain) that lie beyond all such routine measurement, but which need to be understood (and this requirement is listed as one of the report’s main recommendations). It is highly likely that some of the additional ‘vulnerabilities’ in the Scottish population that are highlighted in the report are relevant to these unmeasured aspects.

As stated, the inadequate measurement of deprivation is also only one component of a very complex explanatory model. Furthermore, the excess has been observed across all social classes, not just among the poorest in society.

### What should we do about the excess?

The report includes a large number of specific policy recommendations, aimed both at national and local government, that the authors believe would be beneficial in addressing the excess. Economic policies in the UK, in Scotland and locally are critical.

To address this longstanding issue of excess mortality, we need to both understand the consequences of previous approaches, and target resources at the high level of need highlighted by the report in order to mitigate against, and undo, the effects of previous – and possible future – vulnerabilities in the Scottish population.

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