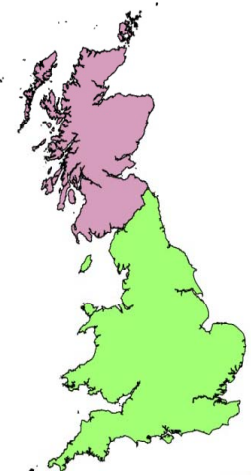


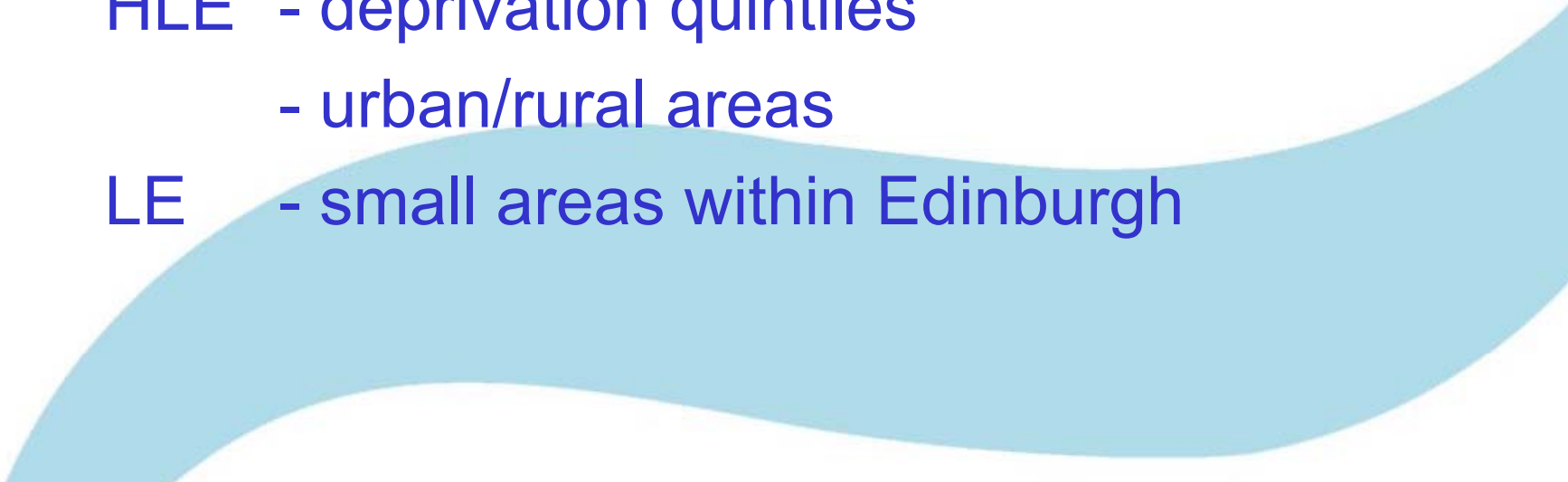
Healthy life expectancy in Scotland



Alison Burlison

Information Services Division
(part of National Health Service in Scotland)

Scottish Public Health Observatory (ScotPHO)

- ScotPHO
 - Life expectancy (LE) – Scotland and Europe
 - Data issues
 - Healthy life expectancy (HLE) - time trends Scotland
 - Inequalities within Scotland:
 - HLE - deprivation quintiles
 - urban/rural areas
 - LE - small areas within Edinburgh
- 

ScotPHO

**Aims to improve access to useful information
for the public health community in Scotland**

- Collaboration – key national organisations involved in public health intelligence in Scotland.
- Virtual observatory (Edinburgh & Glasgow).
- Website:
 - >1,000 registered users
 - >400,000 page views per year



Scottish Public Health Observatory

www.scotpho.org.uk

Search
search the site
Advanced Search
Search e-Library

Behaviour Clinical Risk Factors Life Circumstances Population Groups Comparative Health **Population Dynamics** Health, Wellbeing & Disease Resources Publications



Home

Healthy life expectancy

Text Only | Text Size: A
[Register for website updates](#)

Welcome to the website of the Scottish Public Health Observatory (ScotPHO) collaboration. The collaboration brings together key national organisations involved in public health intelligence in Scotland, led by ISD Scotland and NHS Health Scotland. We are working together closely to ensure the public health community has easy access to clear and relevant information and statistics to support decision making.

We welcome you to try out our growing and evolving website. Along with summary data and statistics, we aim to provide background information, interpretation, policy notes, commentaries on data sources, references and links to further information for a wide range of topics relating to the health of the Scottish population. You will also find our new [Community Health and Wellbeing Profiles](#) for CHPs in Scotland and the [Scotland and European Health for All Database](#).



ScotPHO is part of APHO

Top 5 Hits this week

- [New CHP profiles](#)
- [Sexual health: key points](#)
- [PHINS Seminar - Friday 4th September 2009](#)
- [ScotPHO reports and papers: obesity in Scotland](#)

What's New

- 12/5/2009 [PHINS seminar - Friday 4th September 2009](#)
- 12/5/2009 [News alerts: w/b 2nd May 2009](#)
- More site news is available on the [News Archive](#) page.

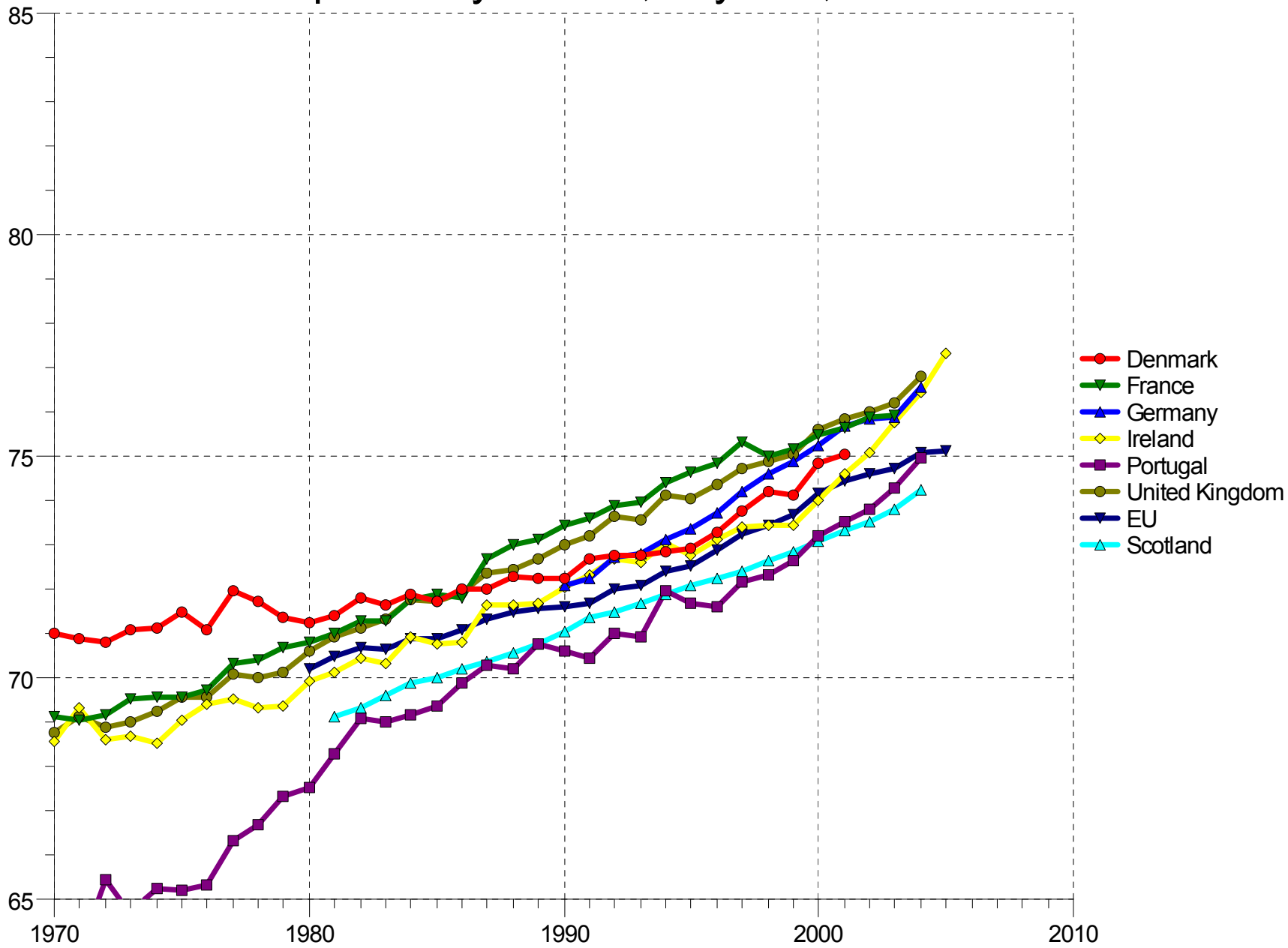
Health for All

Health Statistics

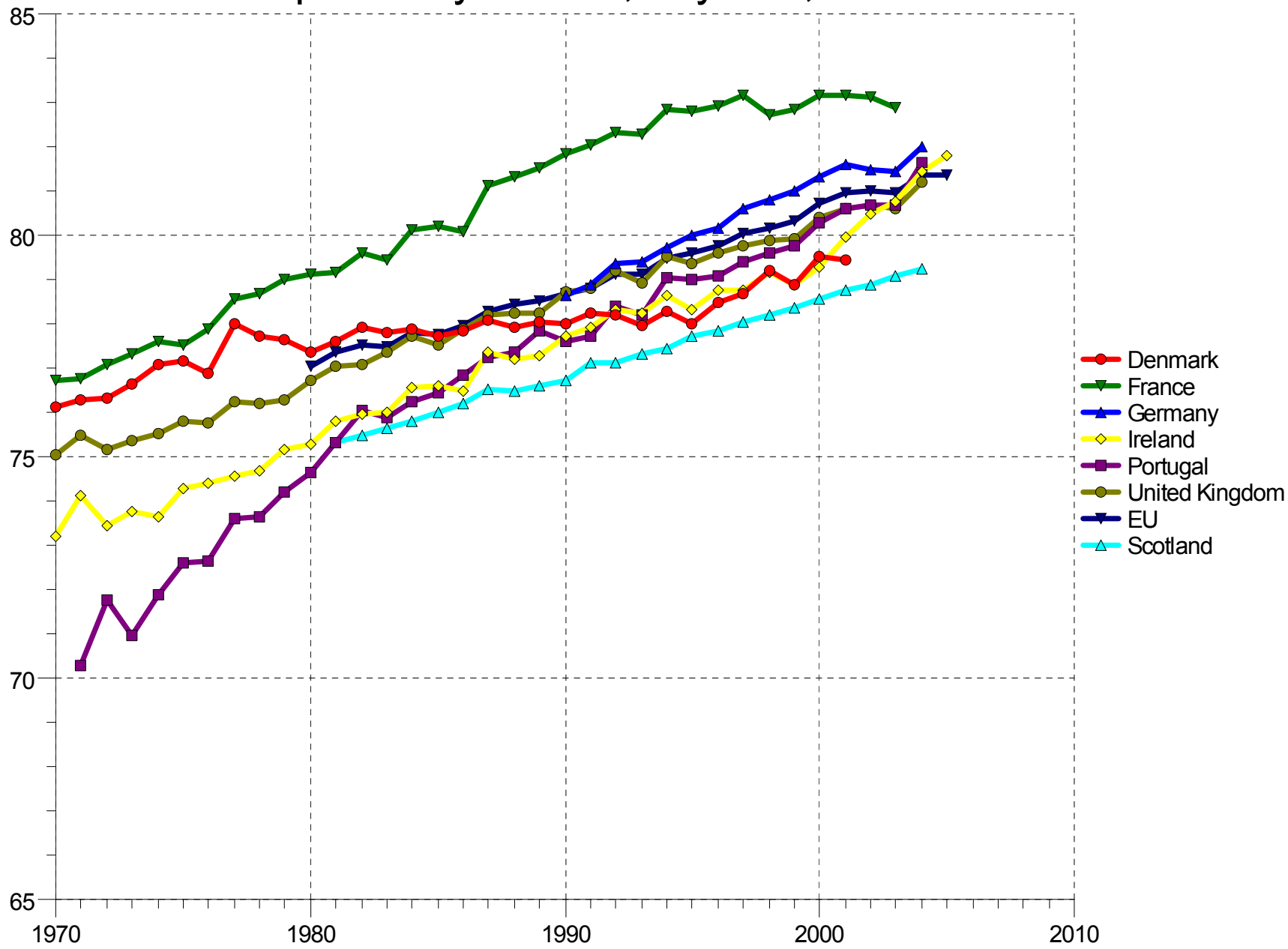
[Scotland and European Health for All \(HfA\) Database](#)



Life expectancy at birth, in years, male



Life expectancy at birth, in years, female



HLE in Scotland

Internationally

Scotland **lower** LE than most Western European countries, and apparently **lower** DFLE at birth than many (especially for males).

Comparable health data required.





HLE calculations for Scotland

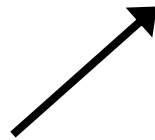
Deaths
registrations



Population
mid-year
estimates



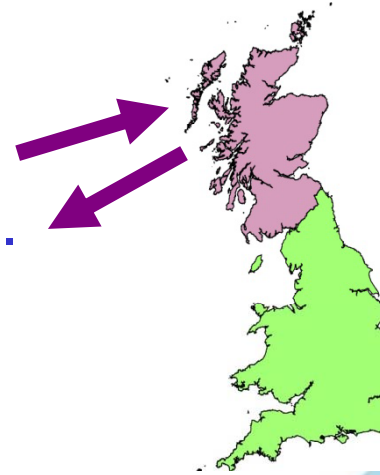
Abridged life tables, with period
LE based on Chiang (II) and
HLE based on Sullivan method



Self-assessed health
'good'/'fairly good' versus 'not good'
(surveys or Census)

Death registrations

residents of Scotland who die in Scotland
non-residents who die in Scotland
residents of Scotland who die outwith Scotland.



For sub-Scotland analyses, we impute area of residence for non-residents dying here, to compensate for the loss of residents dying outwith Scotland.

Self-assessed health (SAH) for HLE calculations

Census

The most robust available estimates of SAH and HLE in 2001
No SAH question in 1991 so no historical trends
HLE calculations down to medium-sized areas
(M 5-year population ~48,000)

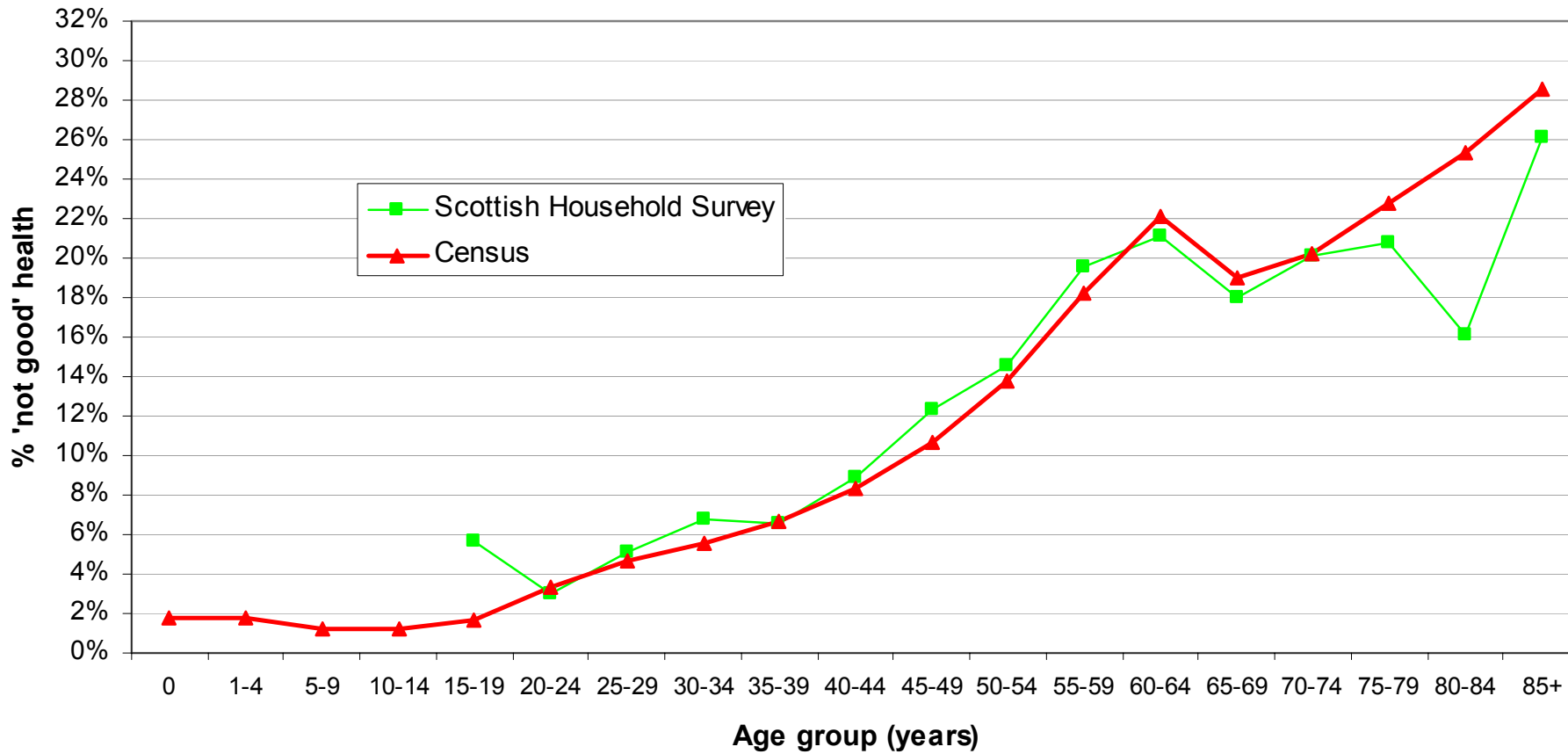
Scottish Household Survey

Annual HLE trends for Scotland
(M population ~2.5m)
2-year period HLE trends for deprivation quintiles
(M 2-year population ~1m)
NOT robust for smaller areas
Only for ages 16+, so 2001 Census SAH used for <16s
For females, gives slightly worse SAH and lower HLE than Census.

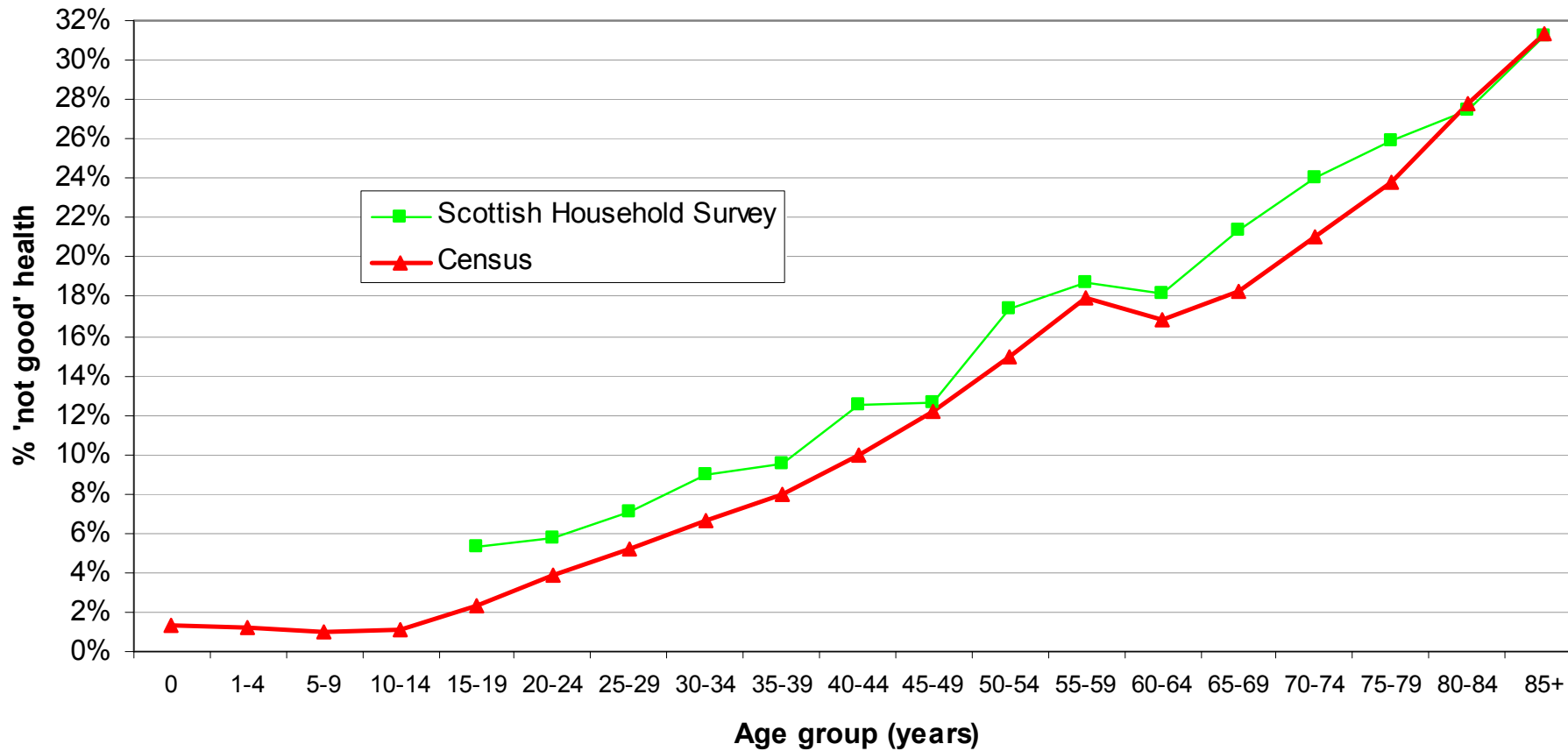
Future trends

2011 Census and 2009 Scottish Household Survey
→ harmonised SAH question.

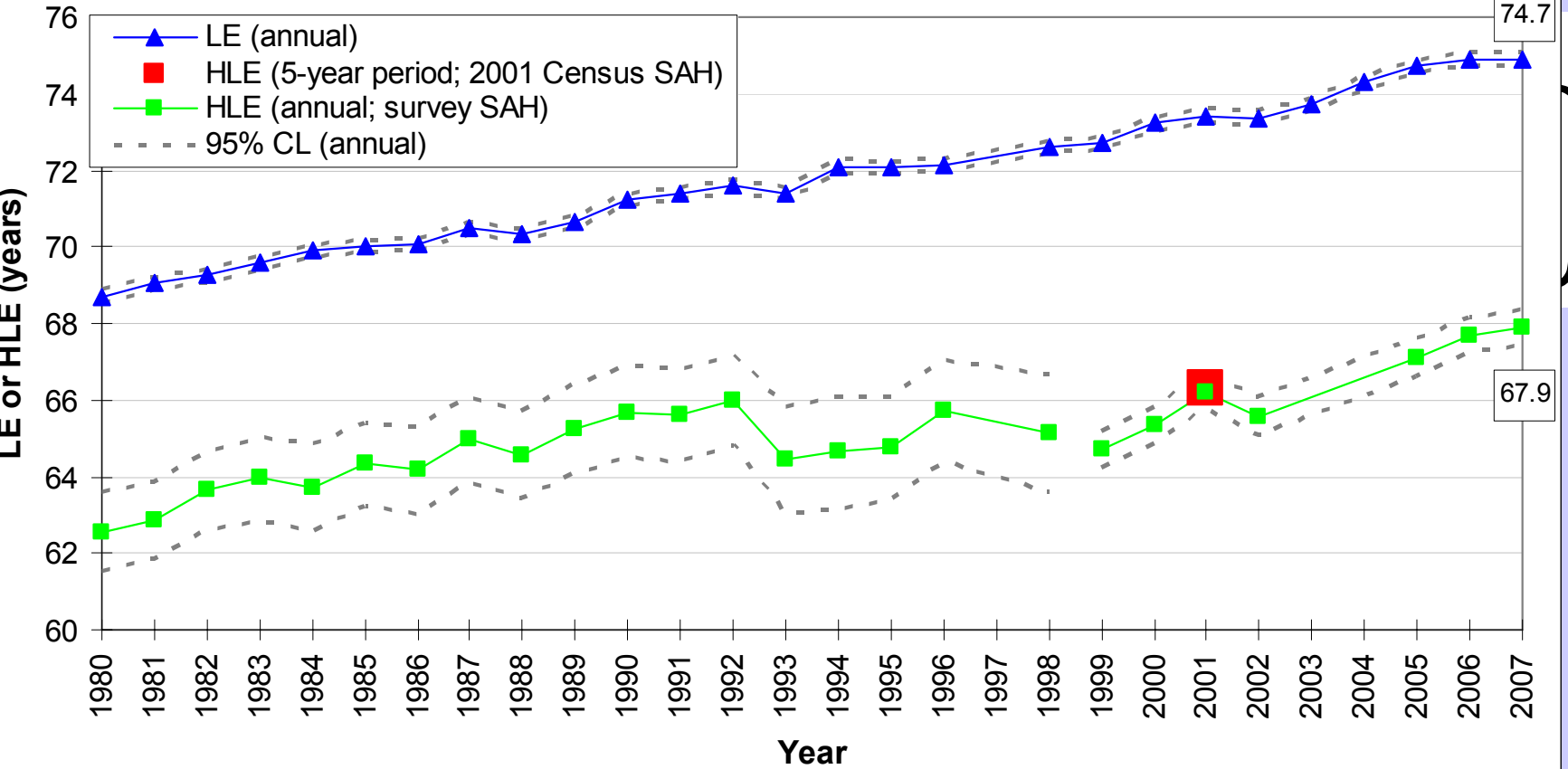
Scotland MALES: % respondents in 'not good' health, 2001



Scotland FEMALES: % respondents in 'not good' health, 2001

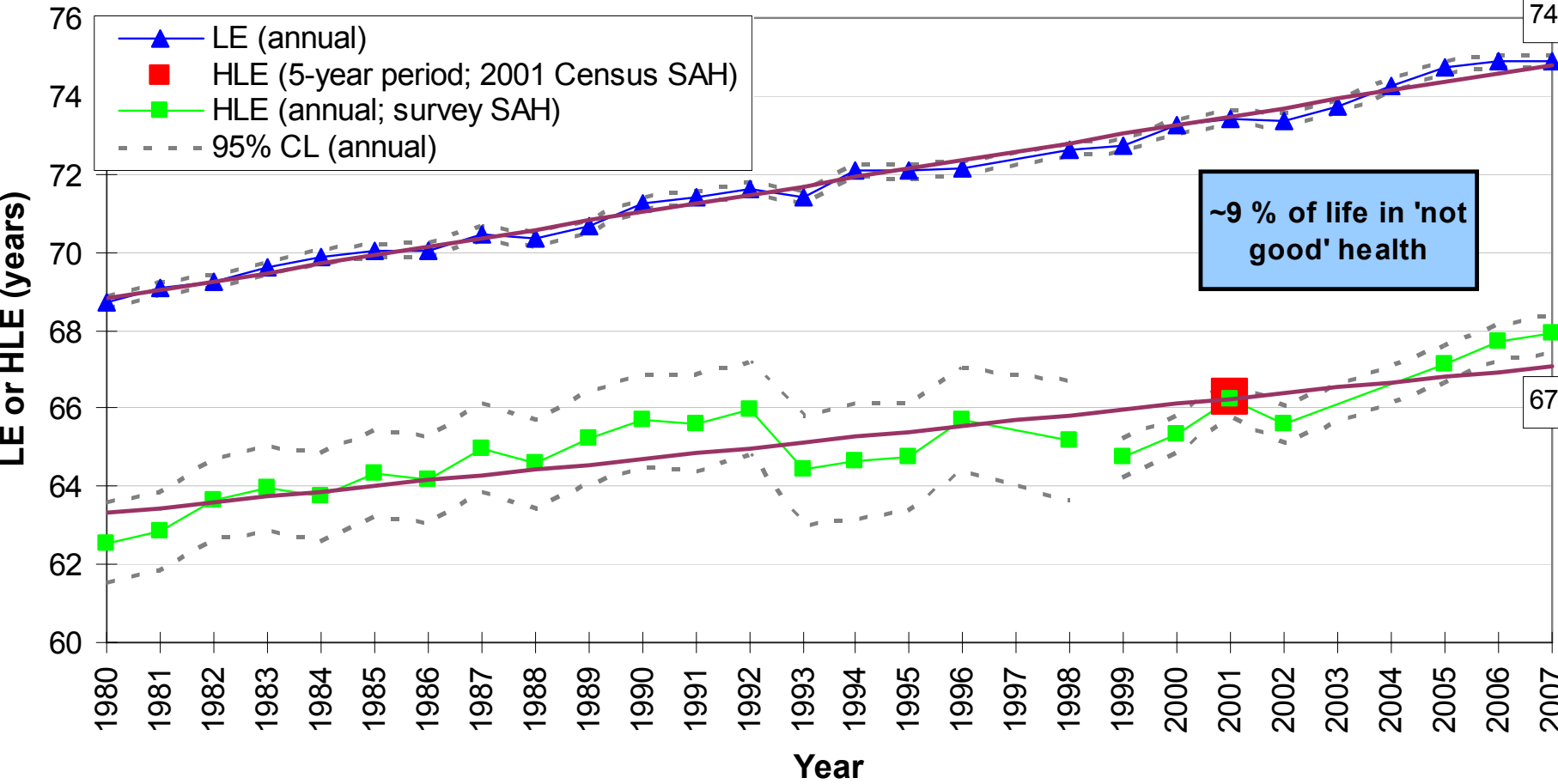


Scotland MALES: LE and HLE at birth, 1980-2007

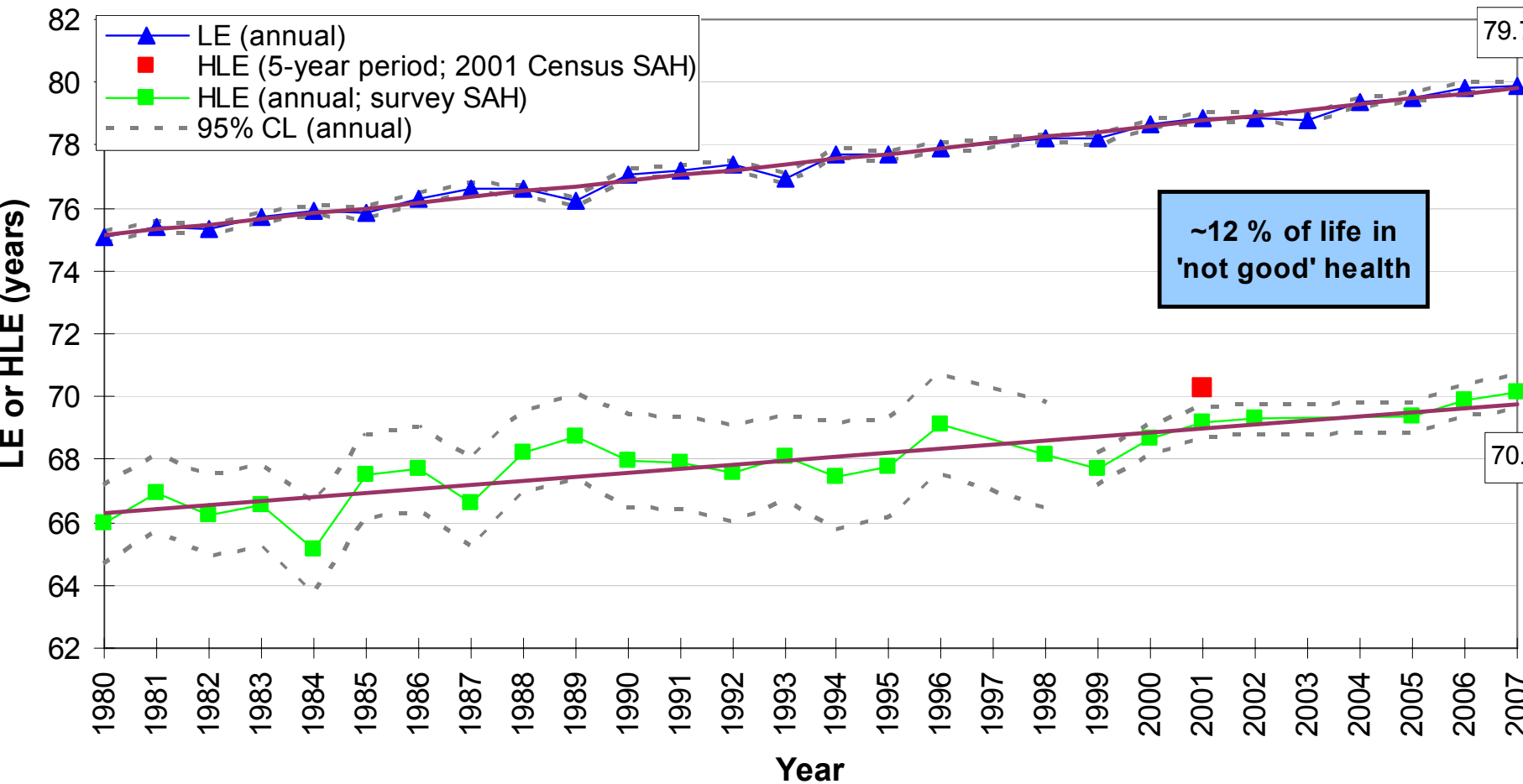


'No good health'

Scotland MALES: LE and HLE at birth, 1980-2007



Scotland FEMALEs: LE and HLE at birth, 1980-2007



HLE in Scotland

With time

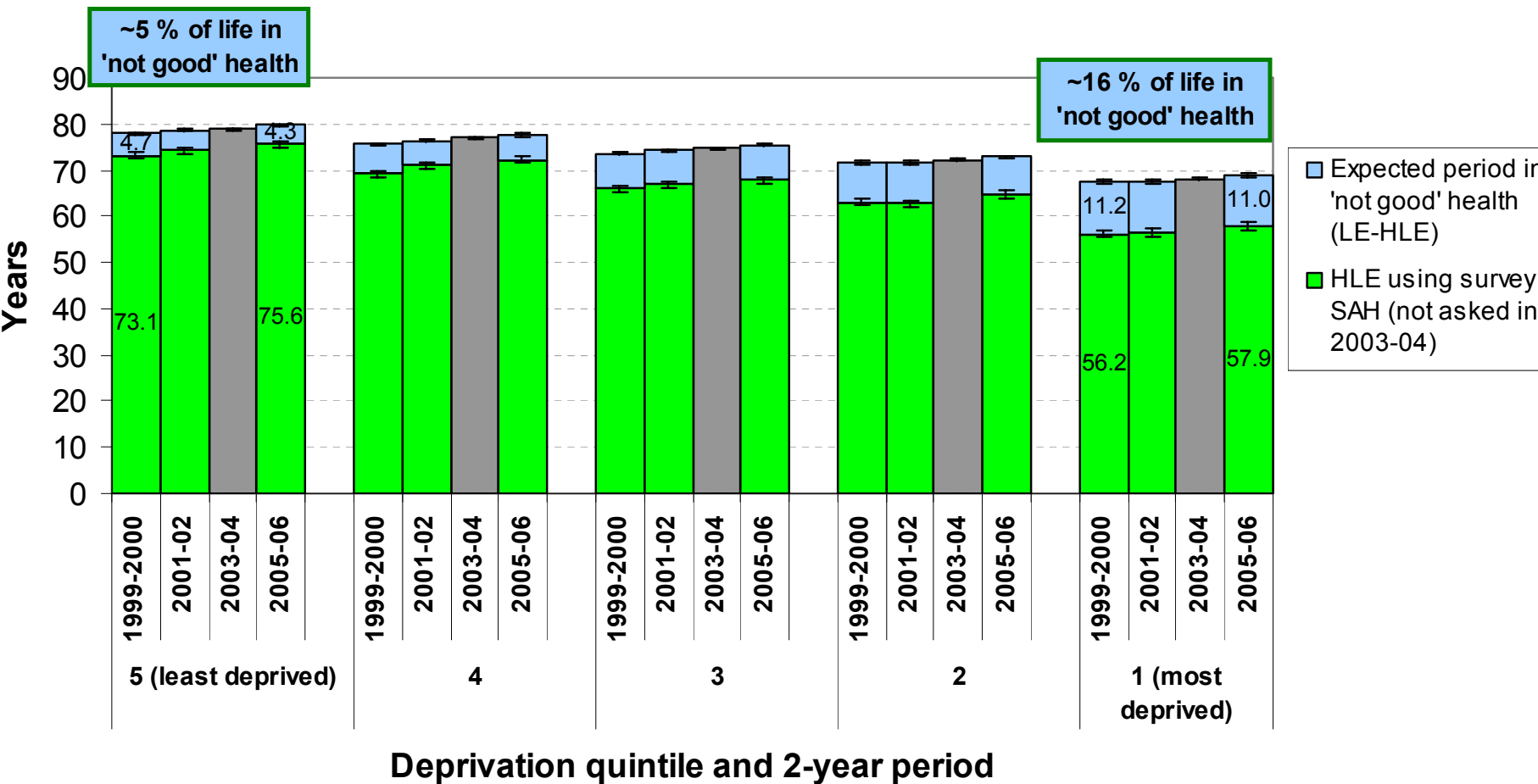
LE ↑ HLE ↑ years in 'not good' health ↑

(% life in 'not good' health unchanged)

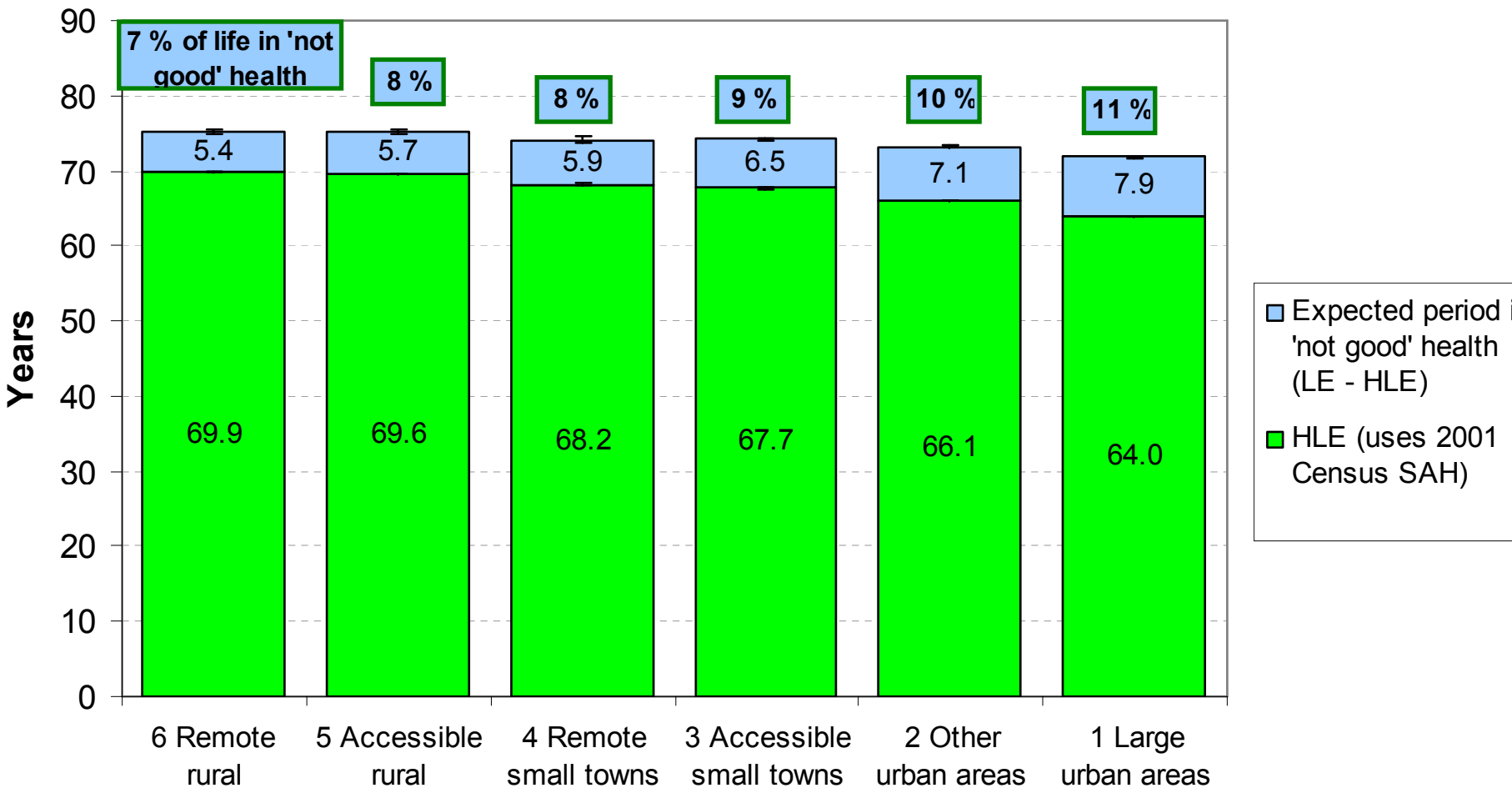
Scottish Government

- High-level target
 to increase HLE in Scotland 2007-2017
National indicator
 to increase HLE at birth in the most deprived areas
 - **Long-term Monitoring of Health Inequalities**
HLE a key indicator
- 

LE and HLE at birth (with 95% CIs) and period in 'not good' health, by deprivation quintile in Scotland: MALES



LE and HLE at birth (with 95% CIs) and period in 'not good' health, by 2001 urban rural classification in Scotland: MALES, 1999-2003



HLE in Scotland

With increasing deprivation (and urbanisation)

LE ↓ HLE ↓ years/% life in 'not good' health ↑

Inequalities over time

LE and HLE gaps (least - most deprived):

no significant changes 1999-2000 to 2005-06.

Need more years but SAH harmonisation discontinuity.

Intermediate zones in Scotland

(average M+F population ~4,000)

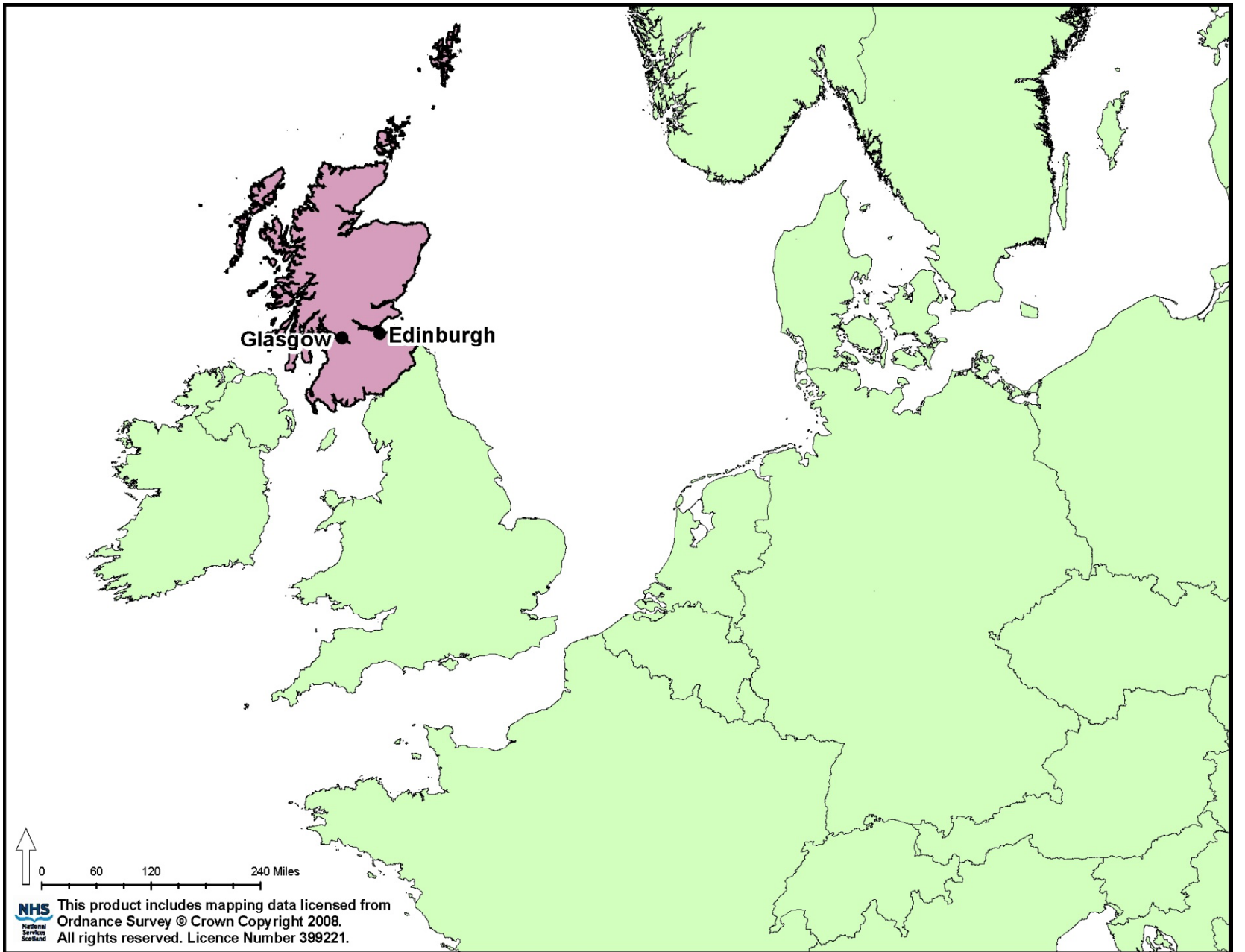
HLE not calculated

LE only presented for M or F where:

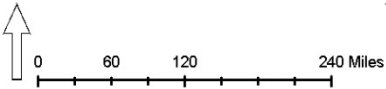
5-year populations $\geq 5,000$

5-year deaths ≥ 40 .



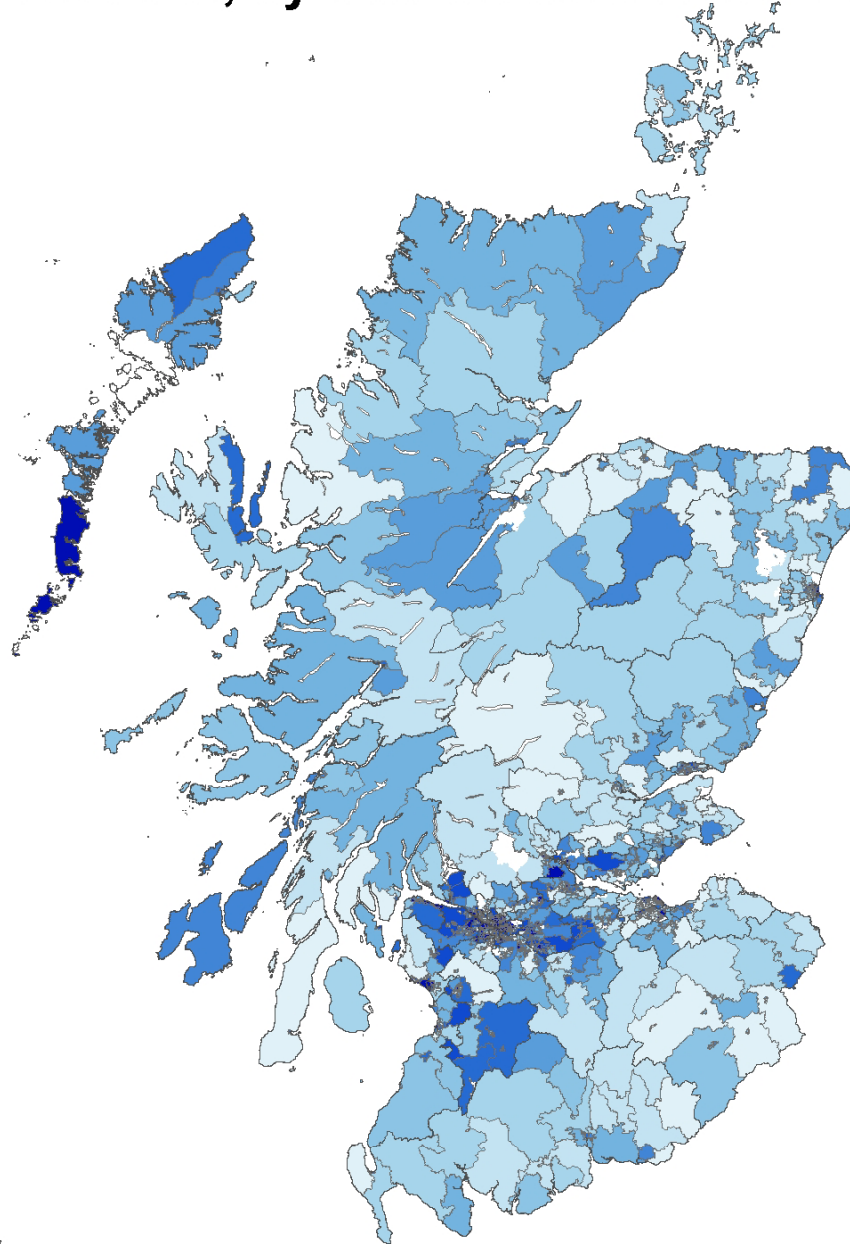


Glasgow ● Edinburgh

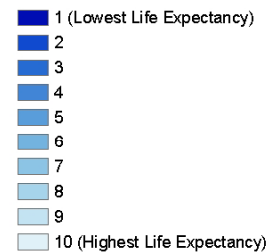


NHS National Services Scotland
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Scotland male LE at birth, by intermediate zone: 2001-05



Legend



0 20 40 80 Miles









CRAIGVILLAR
CASTLE GARDENS

Edinburgh: LE at birth (2001-2005)



Barnton/Cammo area

Males 86.9 years (84.0-89.7)

Females 90.1 years (88.1-92.2)



Greendykes/Niddrie Mains area

Males 61.1 years (57.6-64.7)

Females 71.2 years (67.5-74.9)



HLE in Scotland

1 Internationally

Scotland **lower** LE than most W European countries,
and apparently **lower** DFLE at birth than many

2 With time

LE ↑ HLE ↑ years in 'not good' health ↑

(% life in 'not good' health unchanged)

3 With increasing deprivation (and urbanisation)

LE ↓ HLE ↓ years/% life in 'not good' health ↑

4 Inequalities over time

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