

# Scotland had previously been making progress in improving health and reducing inequalities but this has now stalled

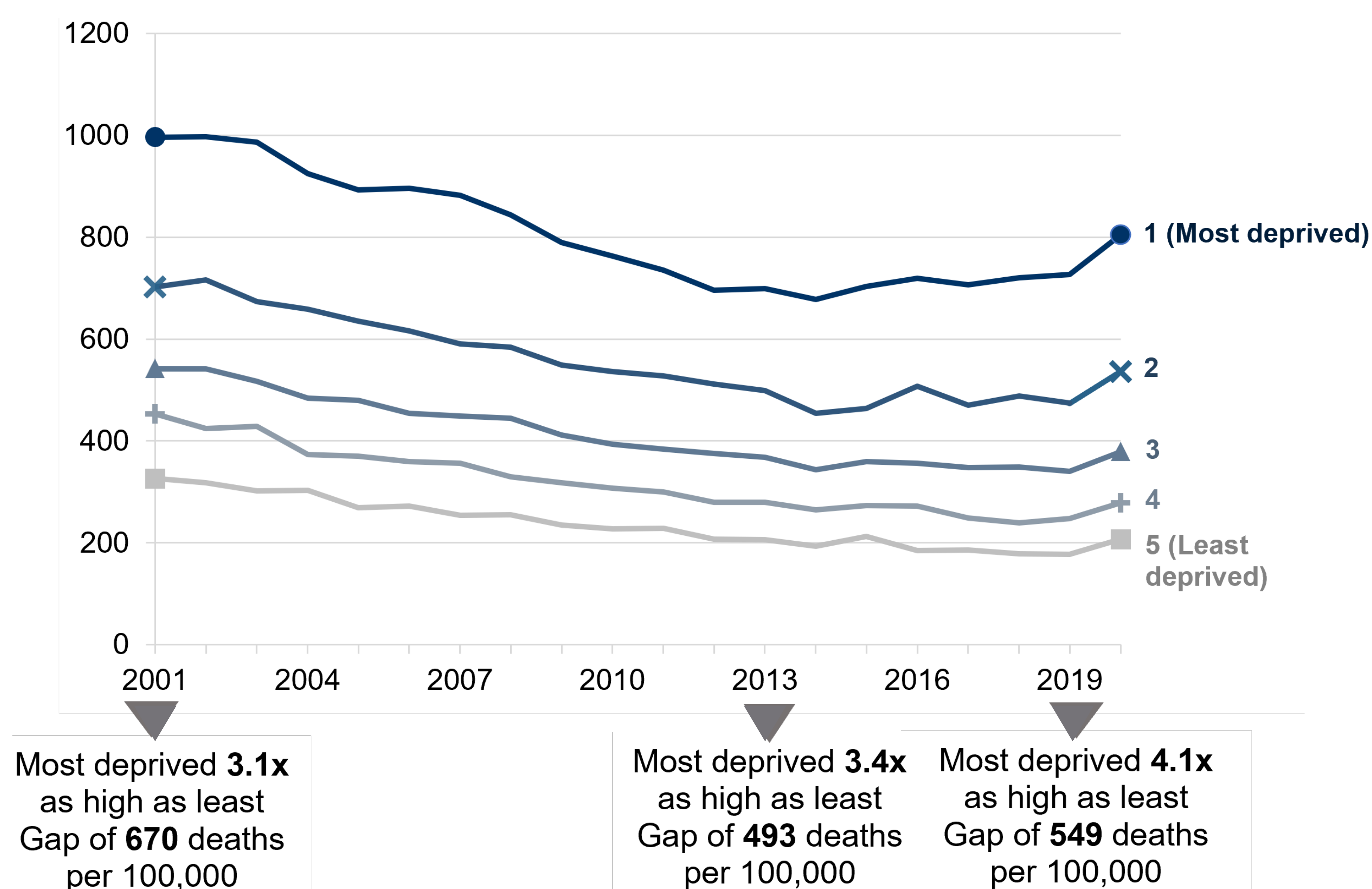
## Between 2000 and ~2013, life expectancy was increasing, and avoidable mortality was decreasing

- Progress was being made in reducing deaths from cancer and cardiovascular disease, alcohol deaths, and suicides.
- Inequalities in infant mortality rates and all-cause mortality in 15 to 44-year-olds narrowed between 2000 and 2013.

## Since ~2013 progress has stalled, with some outcomes worsening in deprived areas

- Improvements in life expectancy stalled, and life expectancy decreased in the most deprived areas.
- From 2013, drug-related deaths increased exponentially.
- Infant mortality and avoidable mortality increased in the most deprived areas.

## Inequalities in avoidable deaths in men were falling during the 2000s, but recently started to increase



Male avoidable mortality rates, per 100,000 population, age standardised, according to fifths of area-level deprivation: 2001-2020. Source: National Records of Scotland. Avoidable Mortality 2020. Data. (Published 2022).



Our findings go some way to confirming that the scale of health inequalities in Scotland is not inevitable. While concern at the generally worsening trends we now face is warranted, the period of health improvement and narrowing of absolute inequalities in the first decade of the 21st century should not be overlooked. Trajectories are amenable to change for the better, as well as for the worse.



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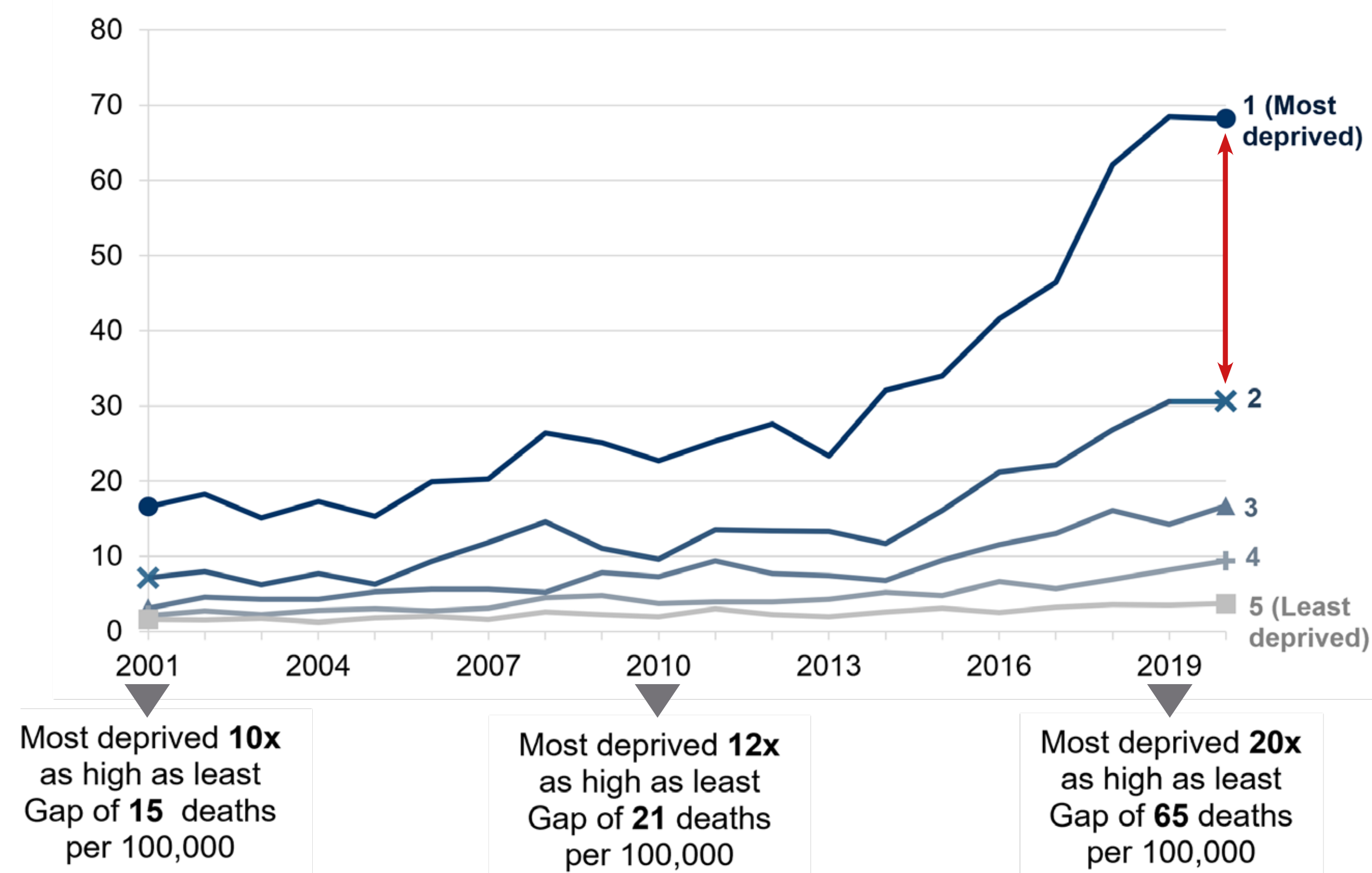


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Health inequalities in Scotland:  
An independent review

# Health consistently worsens as deprivation increases, but the most deprived areas are faring particularly badly

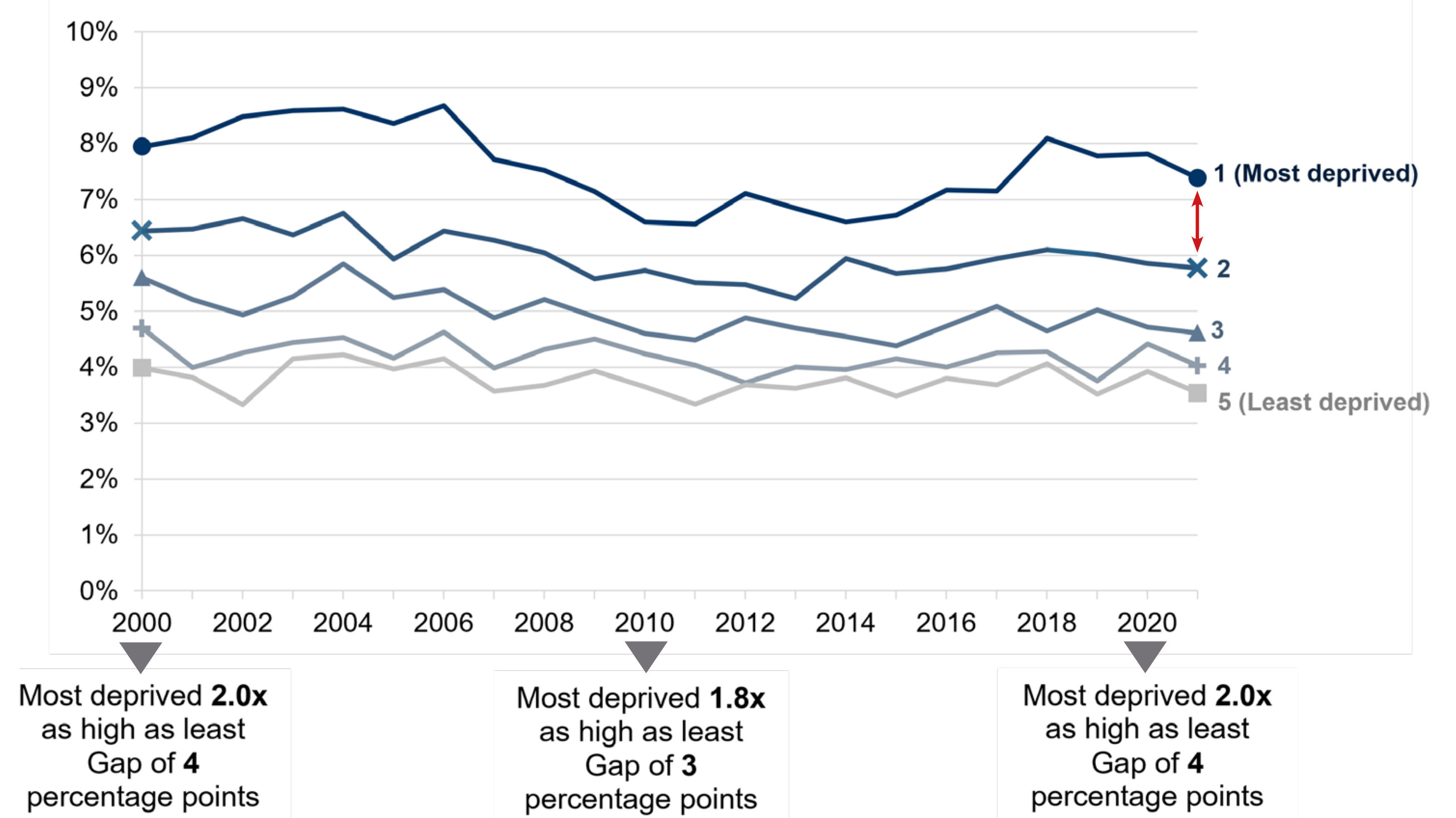
Drug deaths have increased exponentially since 2013 and a particularly large gap has emerged between the most deprived and second most deprived fifth of areas



Drug-related death rates, per 100,000 population, age standardised, according to fifths of area-level deprivation: 2001- 2020.

Source: National Records of Scotland. Drug-related deaths in Scotland 2020. Data. (Published 2021).

There is also a large gap between the most deprived fifth of areas and all other areas in the proportion of babies born low birthweight

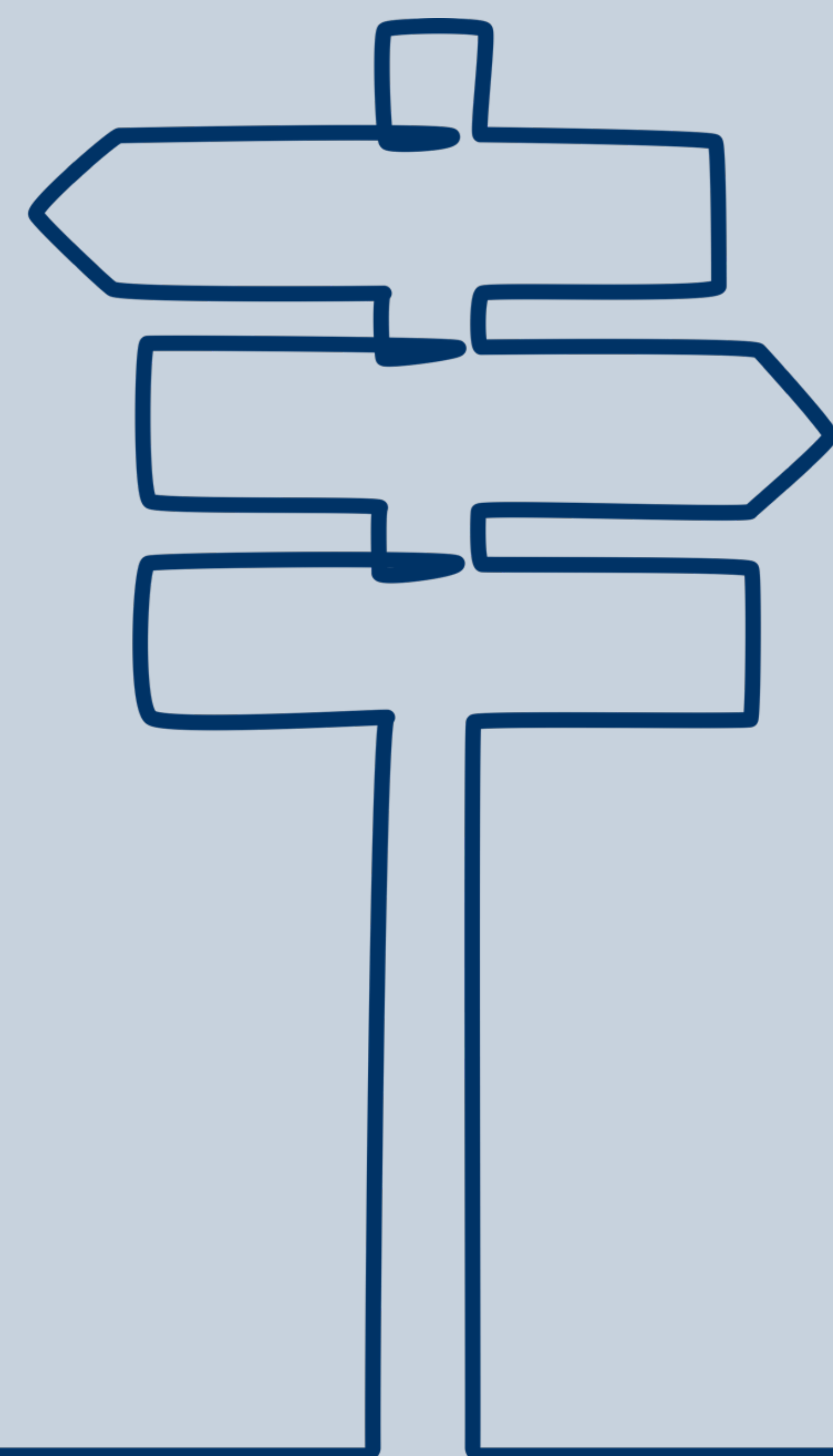


Proportion of singleton babies born low birthweight (%), according to fifths of area-level deprivation: 2000-2021.

Source: Public Health Scotland. Births in Scottish Hospitals. Year ending 31 March 2021.

This larger gap between the most and second most deprived areas is seen across a range of other health, health service and mortality outcomes, including:

- avoidable and amenable mortality
- deaths from alcohol,
- outpatient appointments where the patient 'Did Not Attend',
- child development concerns,
- timely antenatal checks.



We raise a particular concern for those people living in the most deprived areas and experiencing the highest levels of deprivation. Unfair differences in health are seen across the social gradient, but we see a particularly large drop-off across outcomes for those living in the most disadvantaged circumstances.

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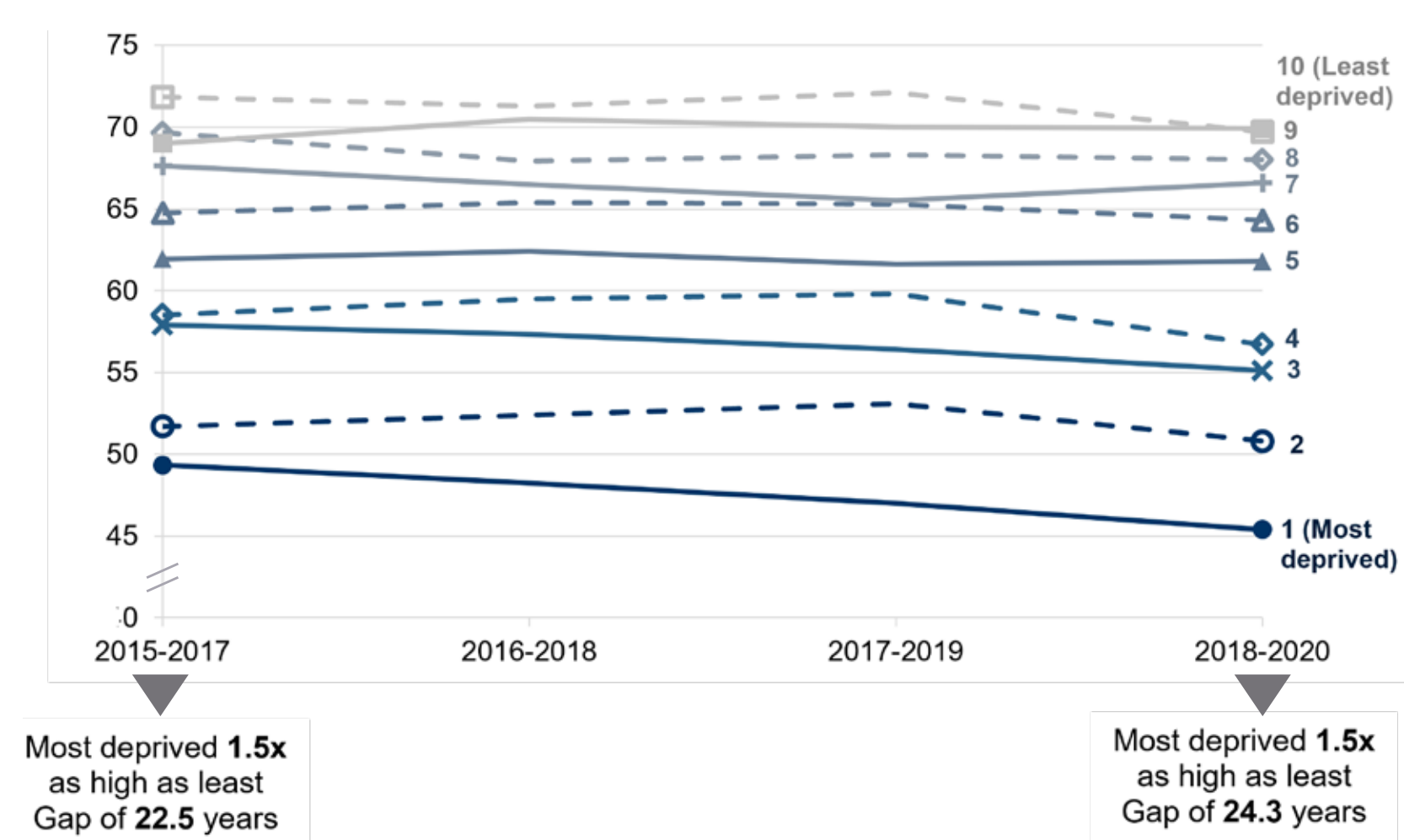


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# Young and middle-aged men are a group of particular concern

For men living in the most deprived areas healthy life expectancy fell by almost five years, between 2015 and 2020, to just 45 years



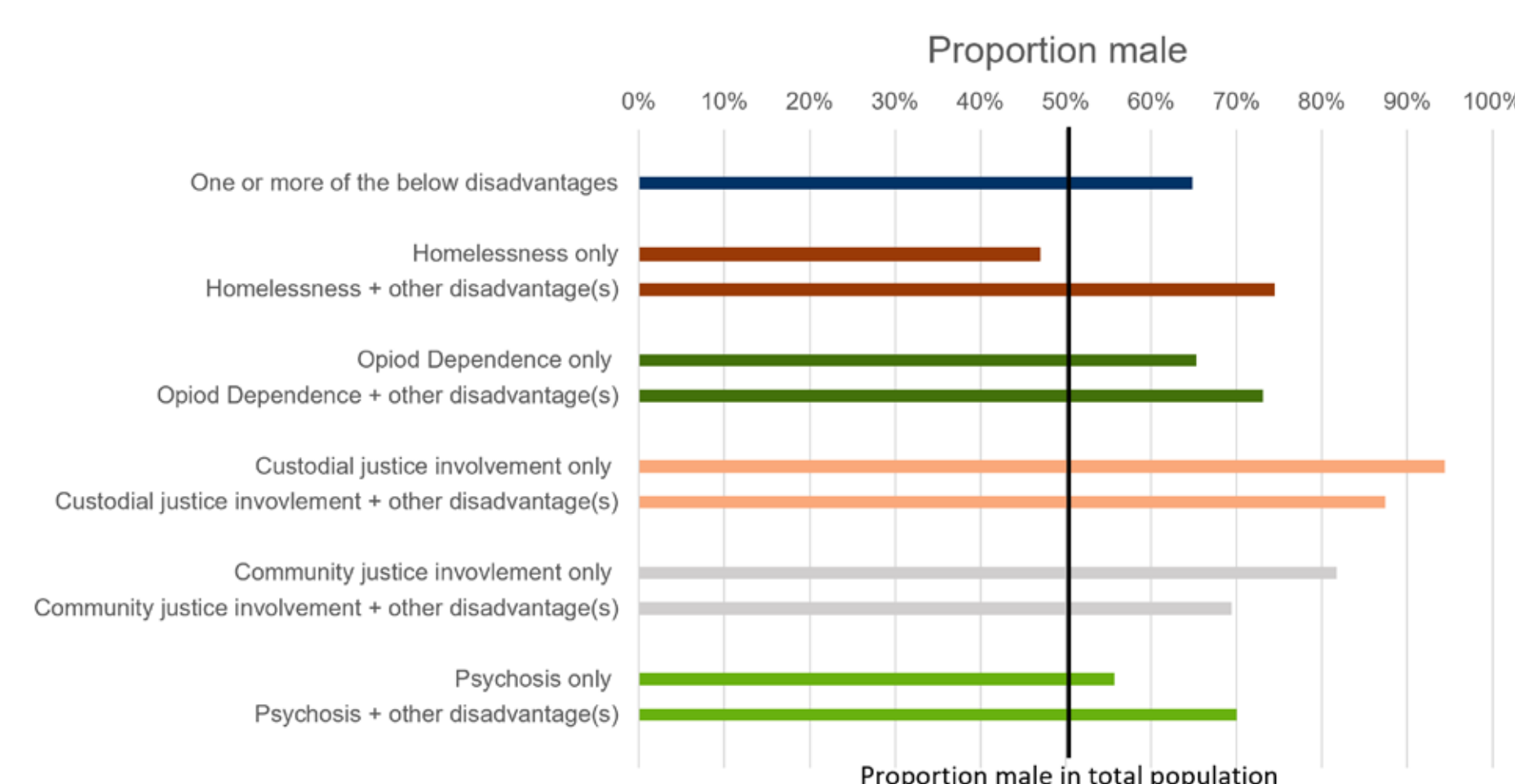
This decline is not mirrored in the least deprived areas where healthy life expectancy has been maintained at 70.

Male healthy life expectancy at birth (years), by area deprivation tenth: 2015-17 to 2018-20.

Source: National Records of Scotland. Healthy Life Expectancy in Scotland reports (Data files).

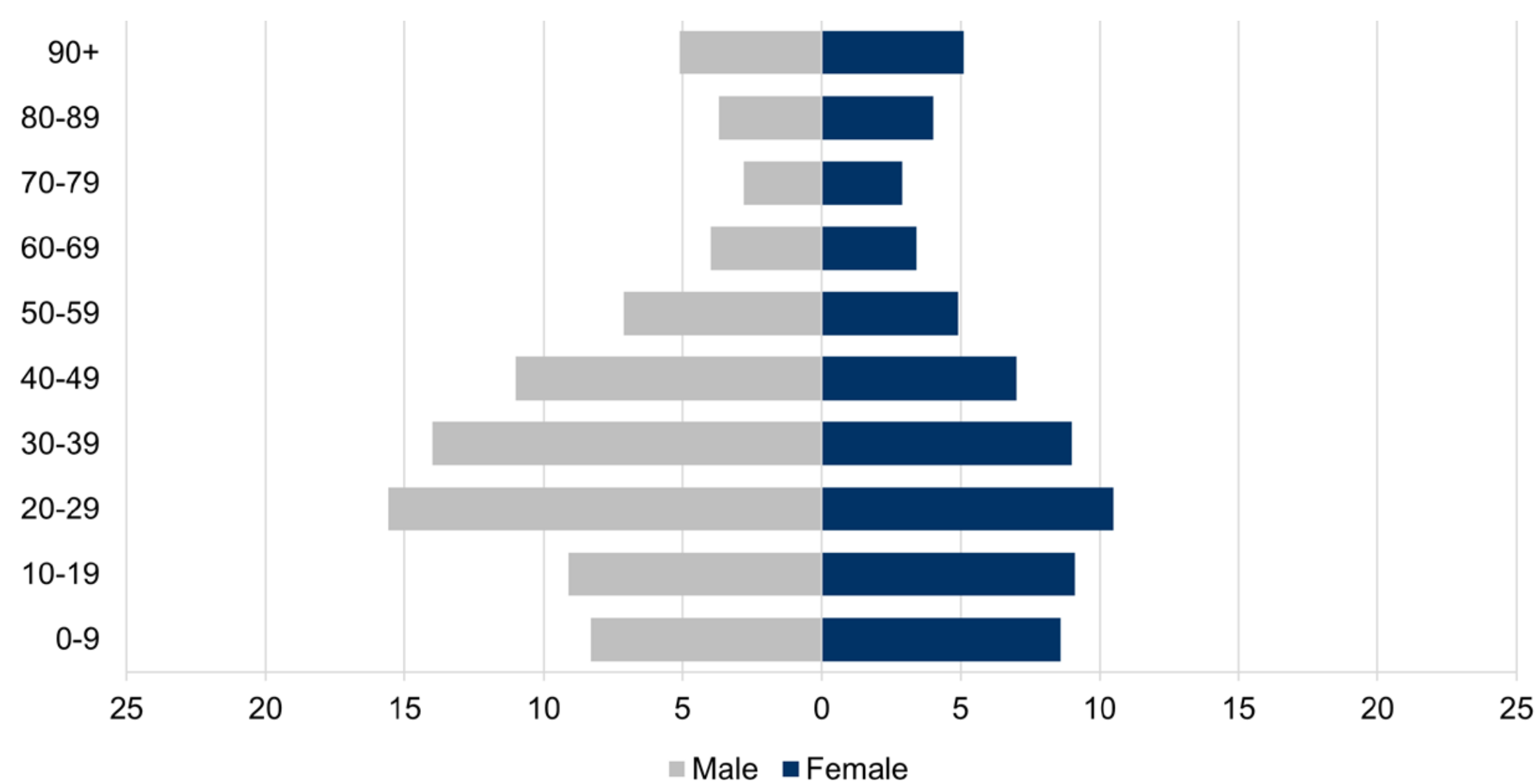
Men are more likely to experience multiple overlapping social disadvantages associated with premature mortality

- 65% of those experiencing homelessness, opioid dependency, custodial or community justice involvement, or psychosis are male.
- Those experiencing multiple disadvantages in combination are also predominantly male.



Proportion of the Glasgow population experiencing five different social disadvantages (alone or in combination) who are male, compared to the proportion of the total population who are male (shown by the solid black line). Source Tweed et al, 2022.

Young and middle-aged men are most likely to miss outpatient appointments



Proportion of outpatient appointments not attended, by age and sex: 2019. Source: ISD Scotland, Acute Hospital Publication, 2019. Data presented refer to quarters April-June.

In addition, the proportion of outpatient and GP appointments where the patient 'Did Not Attend' is three times higher in the most deprived fifth of areas compared to the least.



There are large inequalities for men in Scotland, in healthy life expectancy, mortality and aspects of health service use, with the most deprived young and middle-aged men faring particularly badly. Attention is needed on the underpinning social determinants that influence these outcomes.



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# Children's start in life is not equal

Some aspects of child health have been improving...

Including for:

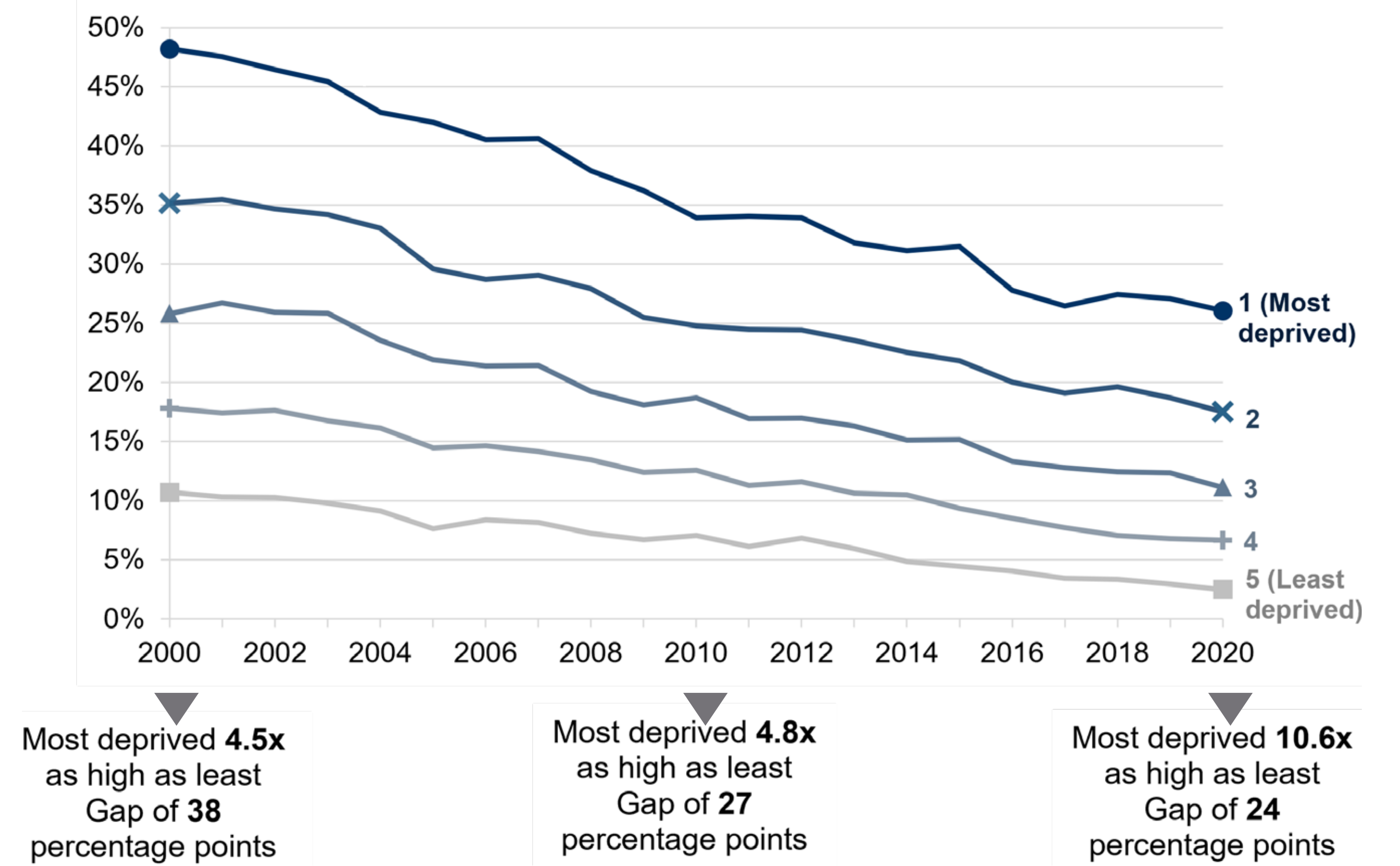
- Timely antenatal booking
- Breastfeeding at 6-8 weeks
- Development in toddlerhood

...yet wide inequalities remain

Compared to children in the least deprived fifth of areas, children in the most deprived fifth experience:

- 1.7x prevalence of late antenatal booking
- 1.9x prevalence of not breastfeeding
- 2.6x prevalence of developmental concerns

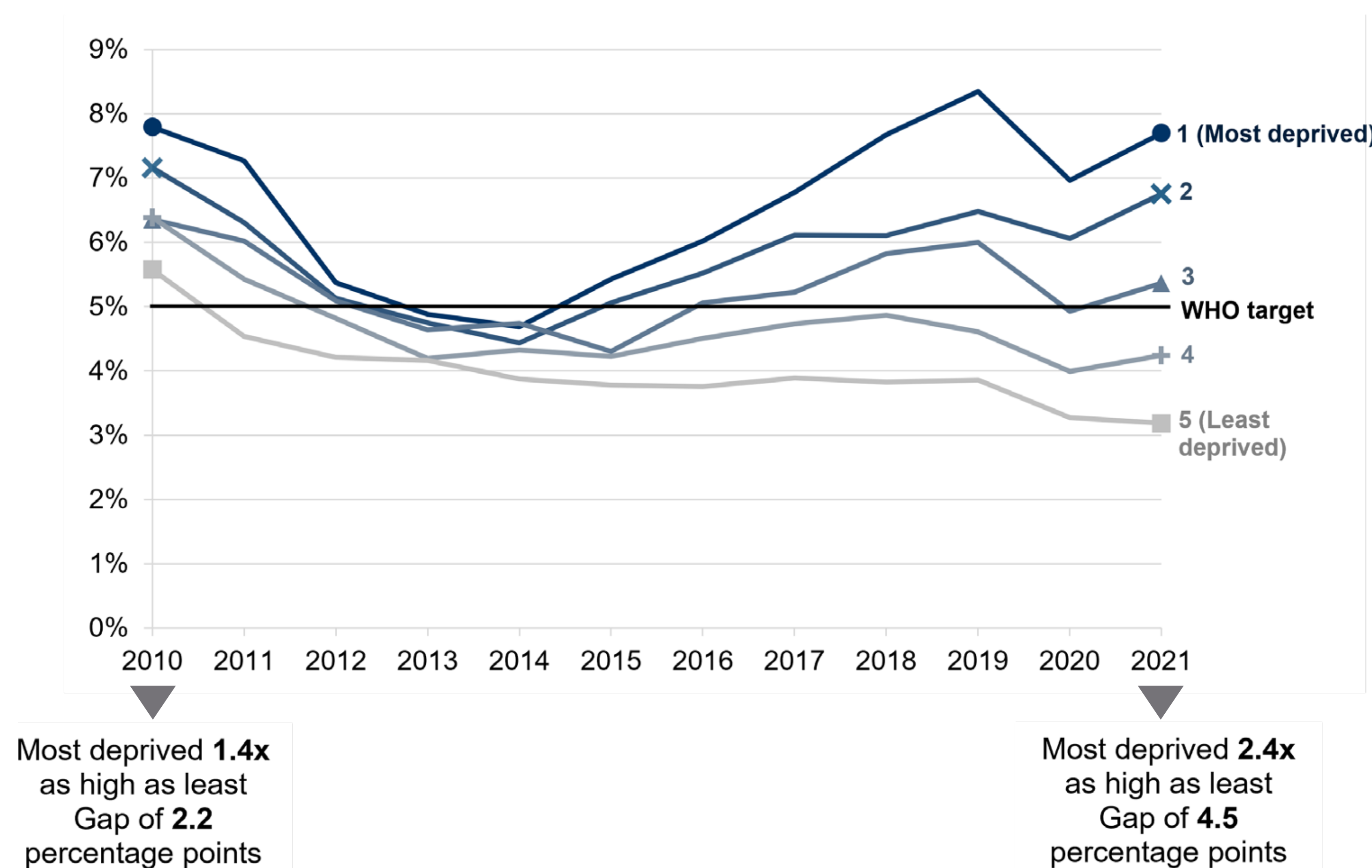
Smoking in pregnancy is falling overall but large inequalities remain.



Prevalence of smoking during pregnancy (percentage of maternities with known smoking status), according to fifths of area-level deprivation: 2000 to 2020.

Source: Public Health Scotland, Births in Scotland Year ending 31 March 2021. Table 3 – maternal smoking status.

For other areas of health, improvements have stalled. For example, the proportion of children not immunised with MMR is increasing in more deprived areas



Percentage of 24-month-olds who had not received the first dose of the MMR, according to fifths of area-level deprivation: 2010-2021 (calendar years). Source: Public Health Scotland. Childhood immunisation statistics Scotland reports.

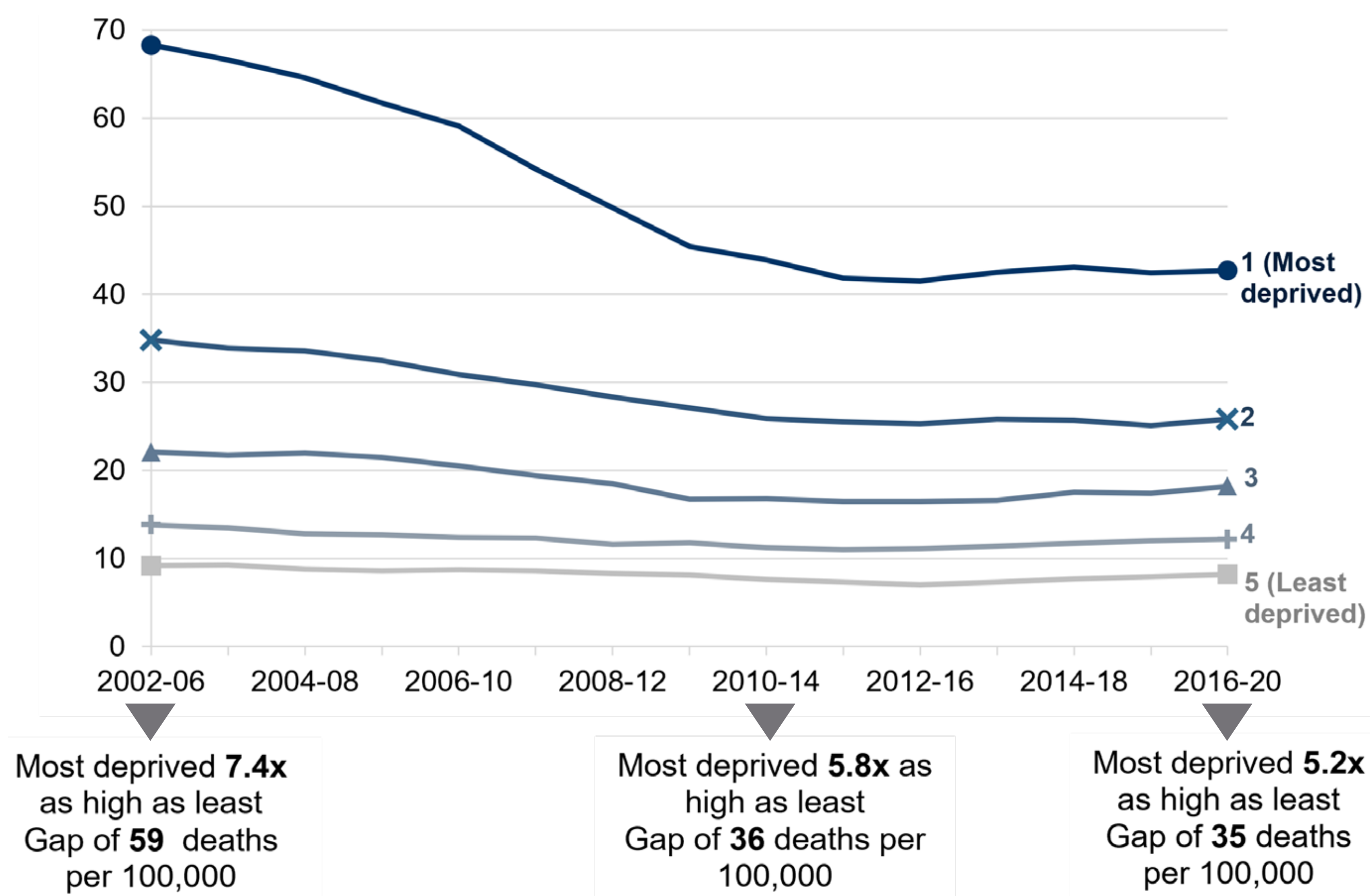


Large and sometimes widening inequalities in early years' outcomes may lead to inequalities in adult health, such as in diabetes and cardiovascular disease. We may therefore be storing up problems for the future, in terms of population health, life chances, and inequalities.



# Inequalities in health and deaths do not always follow patterns in health behaviours

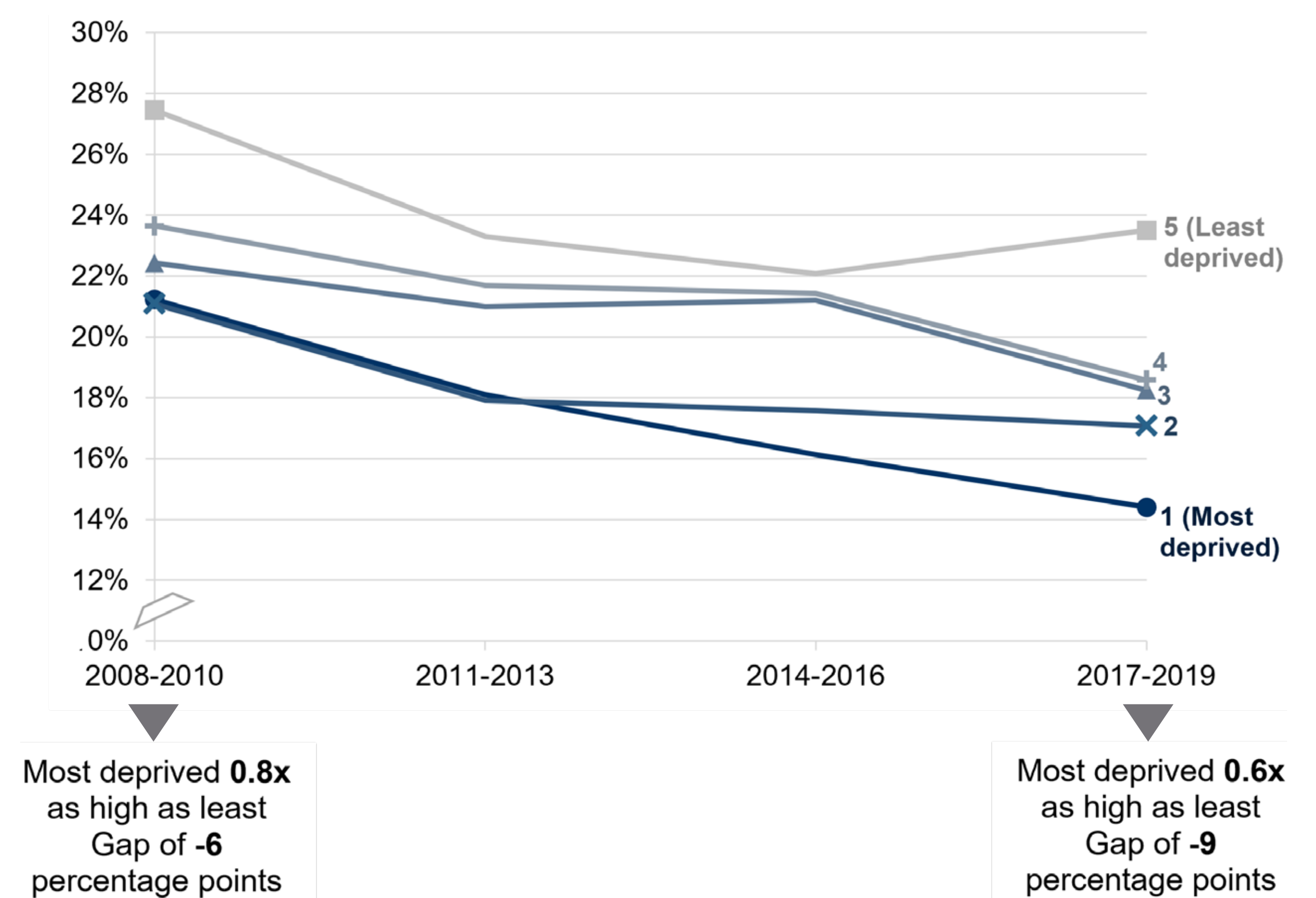
For example, rates of alcohol-specific deaths increase with increasing area deprivation...



Alcohol-specific death rates, per 100,000 population, age standardized, according to fifths of area-level deprivation: 2002-2016-17.

Source: Scotland Public Health Observatory Profile  
[[https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)]

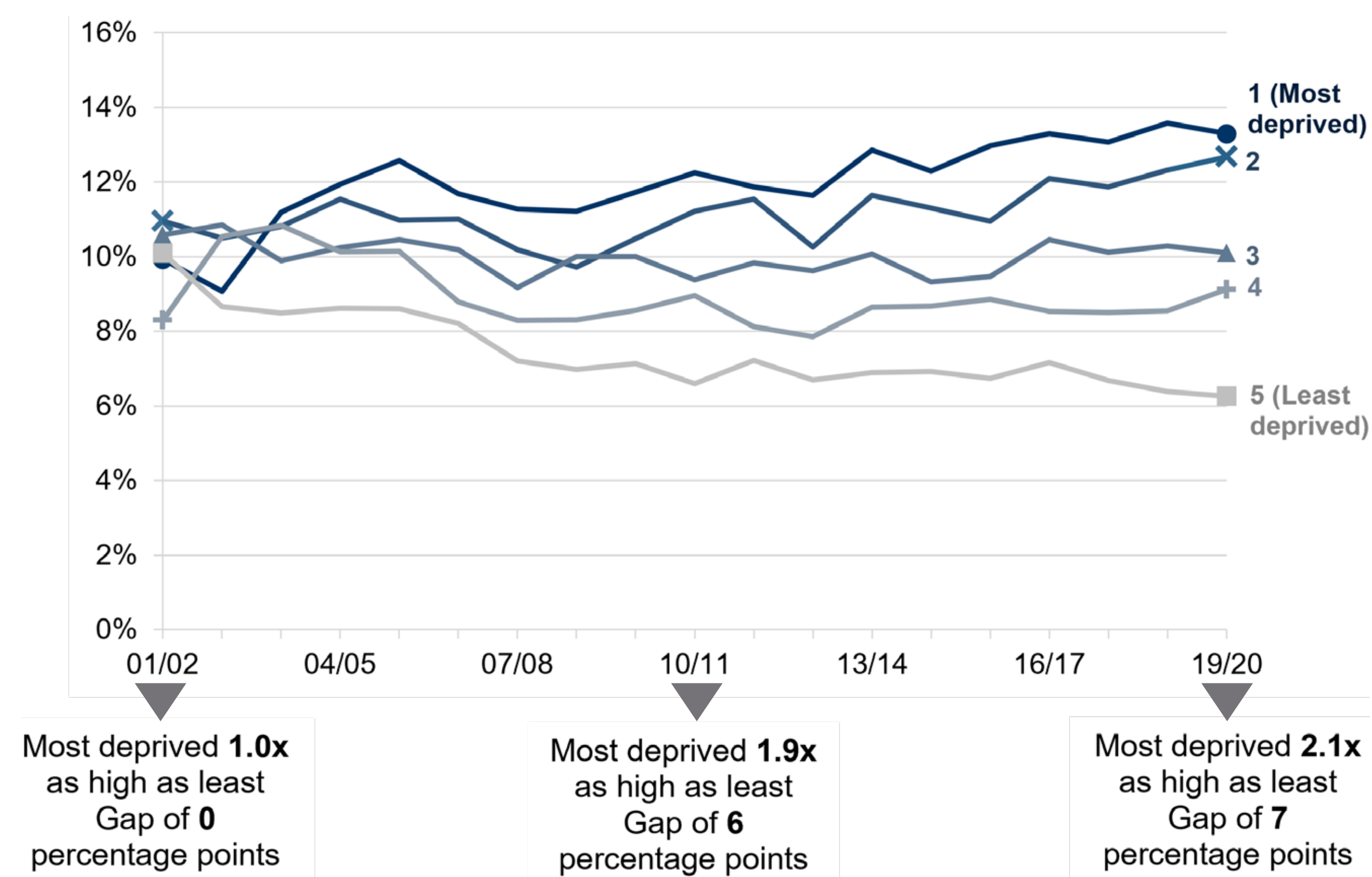
...but hazardous and harmful alcohol consumption shows the opposite



Prevalence of hazardous and harmful weekly alcohol consumption amongst adults (%), according to fifths of area-level deprivation: 2008-10 to 2017-19.

Source: New analysis of the Scottish Health Survey.

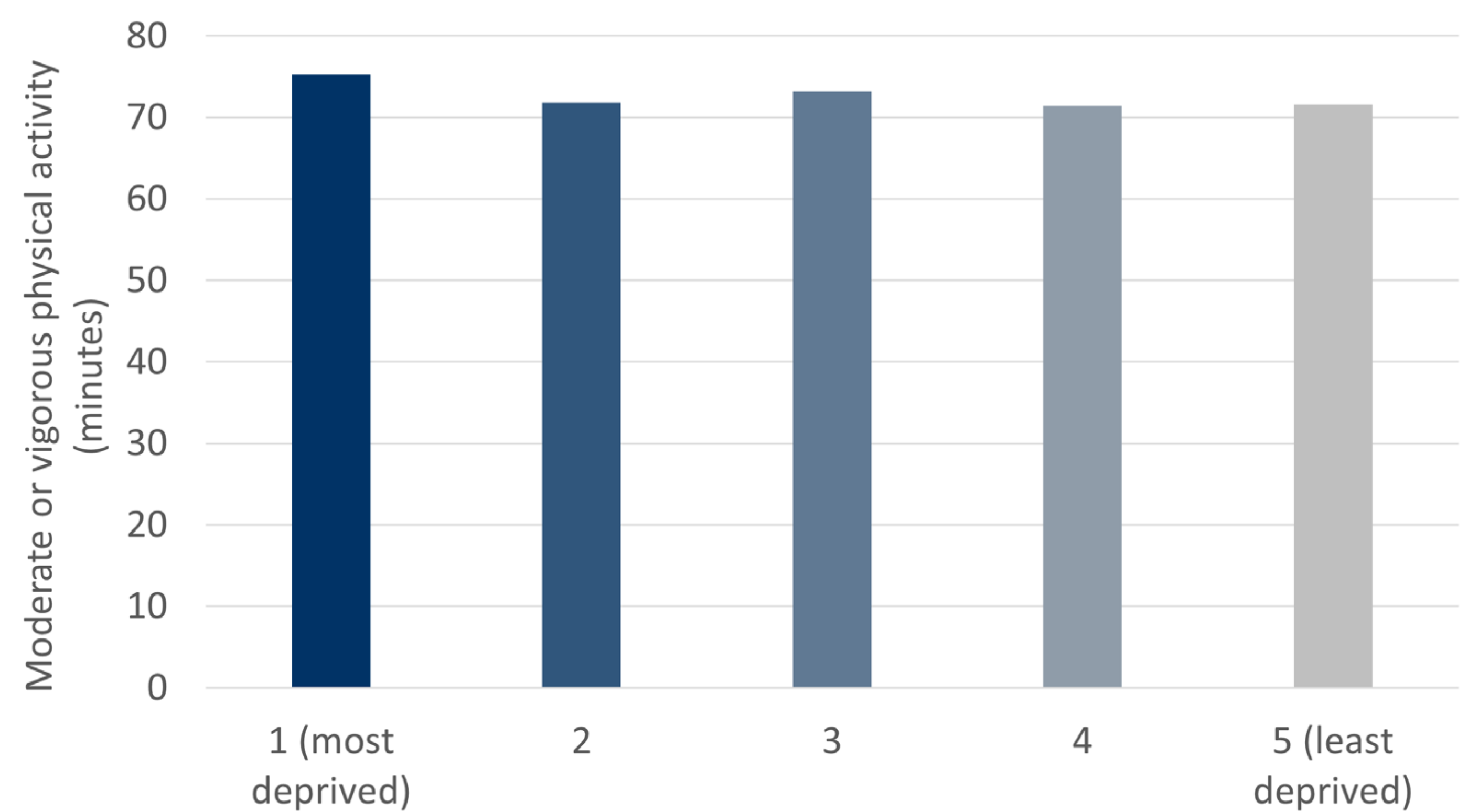
Similarly, risk of childhood obesity increases with increasing area deprivation...



Proportion of children in Primary 1 at risk of obesity (%), according to fifths of area-level deprivation: 2001/2 to 2019/20. Note that coverage of the Primary 1 checks was low until 2007/8.

Source: Public Health Scotland. Primary 1 Body Mass Index (BMI) statistics Scotland report. (2021)

...but we do not see inequalities in children's total physical activity



Mean daily minutes of moderate to vigorous activity, according to fifths of area-level deprivation, 10-11-year-olds, 2015-2016.

Source: Scottish Government. Scottish children's physical activity levels: study analysis (2017)



There is a need for multi-level, cross-sectoral action, that recognises the social determinates of health, including commercial interests, to reduce health inequalities. Well-intentioned behaviour change campaigns can increase health inequalities because only individuals with sufficient resources to implement the changes benefit.

