

The Unequal Pandemic

COVID-19 and Health Inequalities

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POLICY PRESS **SHORTS** INSIGHTS

THE UNEQUAL PANDEMIC

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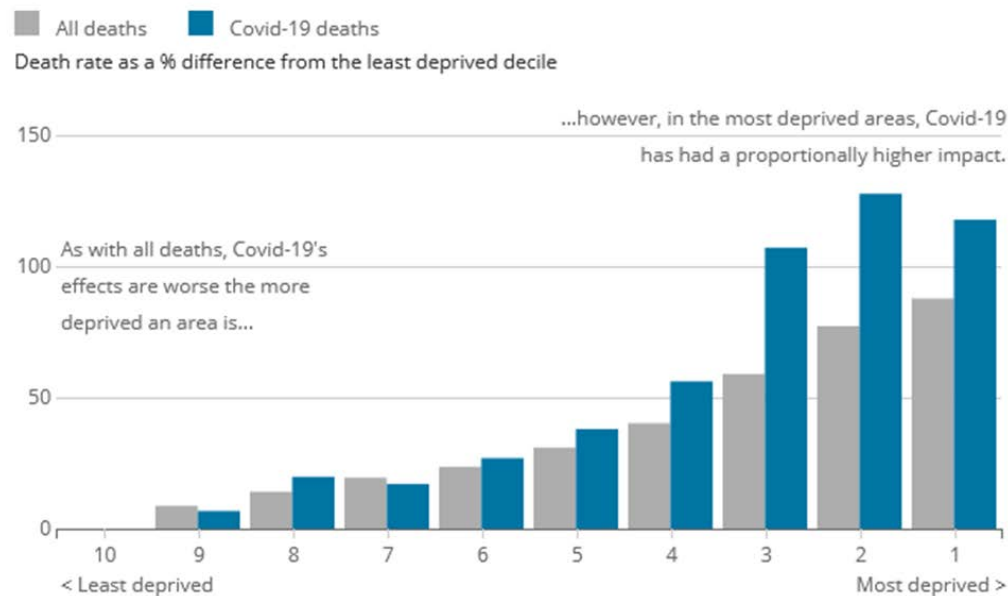
CLARE BAMBRA, JULIA LYNCH
AND KATHERINE E. SMITH

FOREWORD BY KATE PICKETT

COVID-19 COLLECTION

1. Inequalities in COVID-19

Deprivation



England

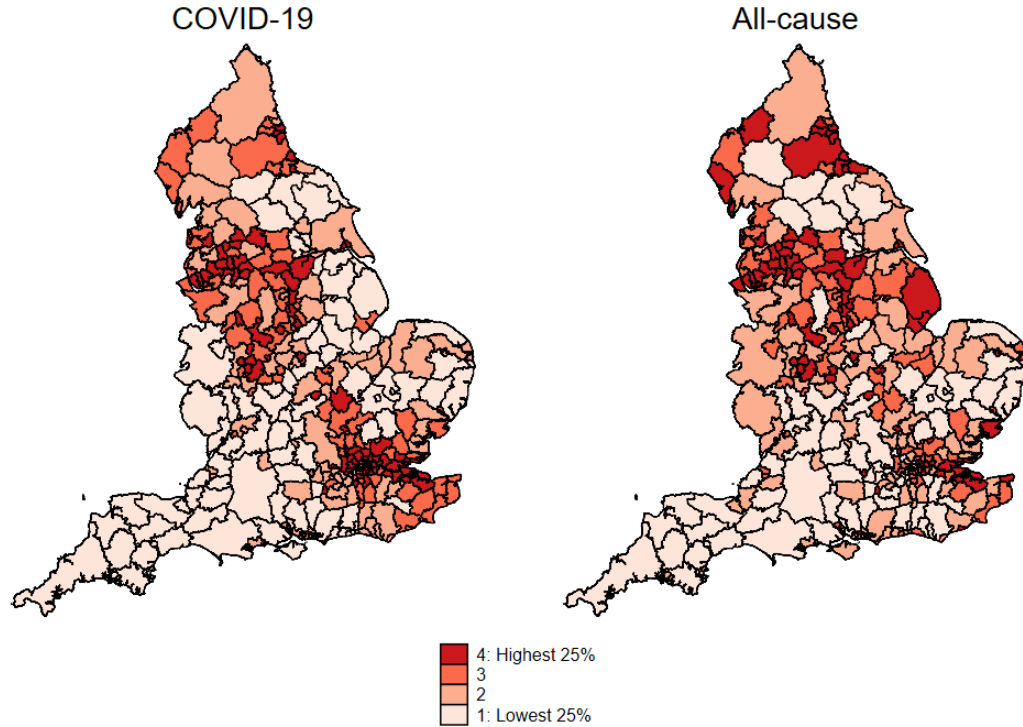
Scotland: COVID-19 death rate Mar-May 2021, was 86.5 per 100,000 in most deprived 20% - more than double that of the 38.2/100,000 in the least-deprived 20%

Wales: March – July 2021, most deprived neighbourhoods had a COVID-19 mortality rate of 121 deaths per 100,000 population, almost twice as high as the mortality rate for the least deprived at 65 deaths per 100,000 population).

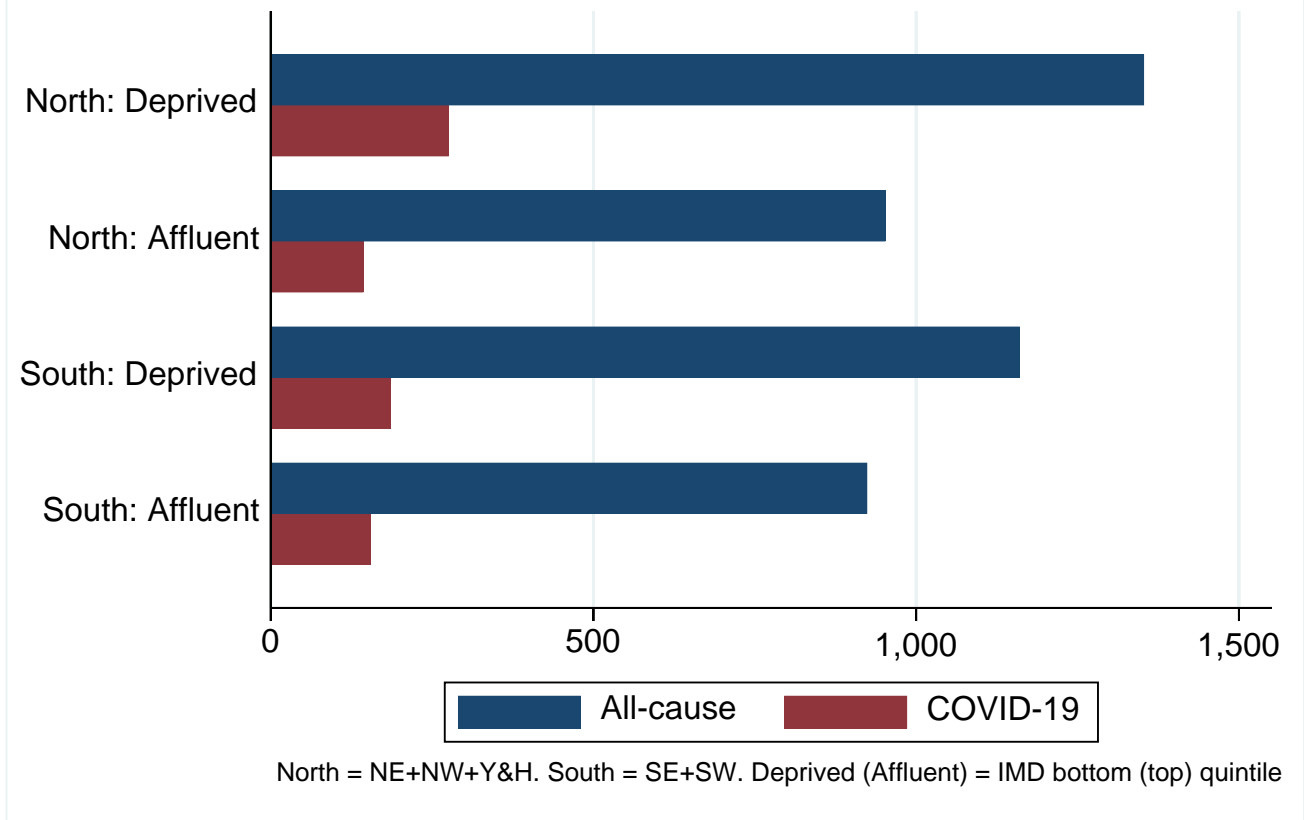
Source: ONS(2021)

Region

Mortality rates: 12 months from March 2020 to February 2021

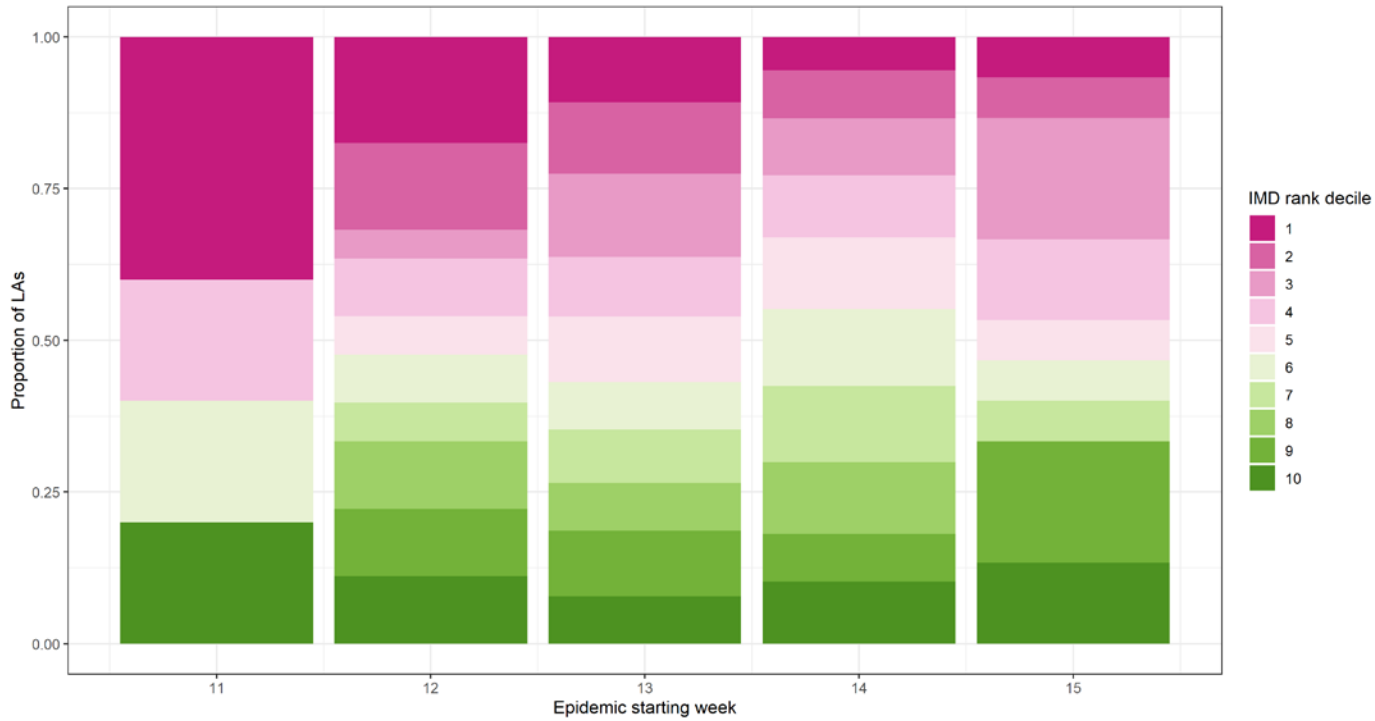


Mortality rates by North vs. South and Deprived vs. Affluent
March 2020 to February 2021



Source: NHTA COVID-19 in North, 2021

Lower IMD ranks began earlier

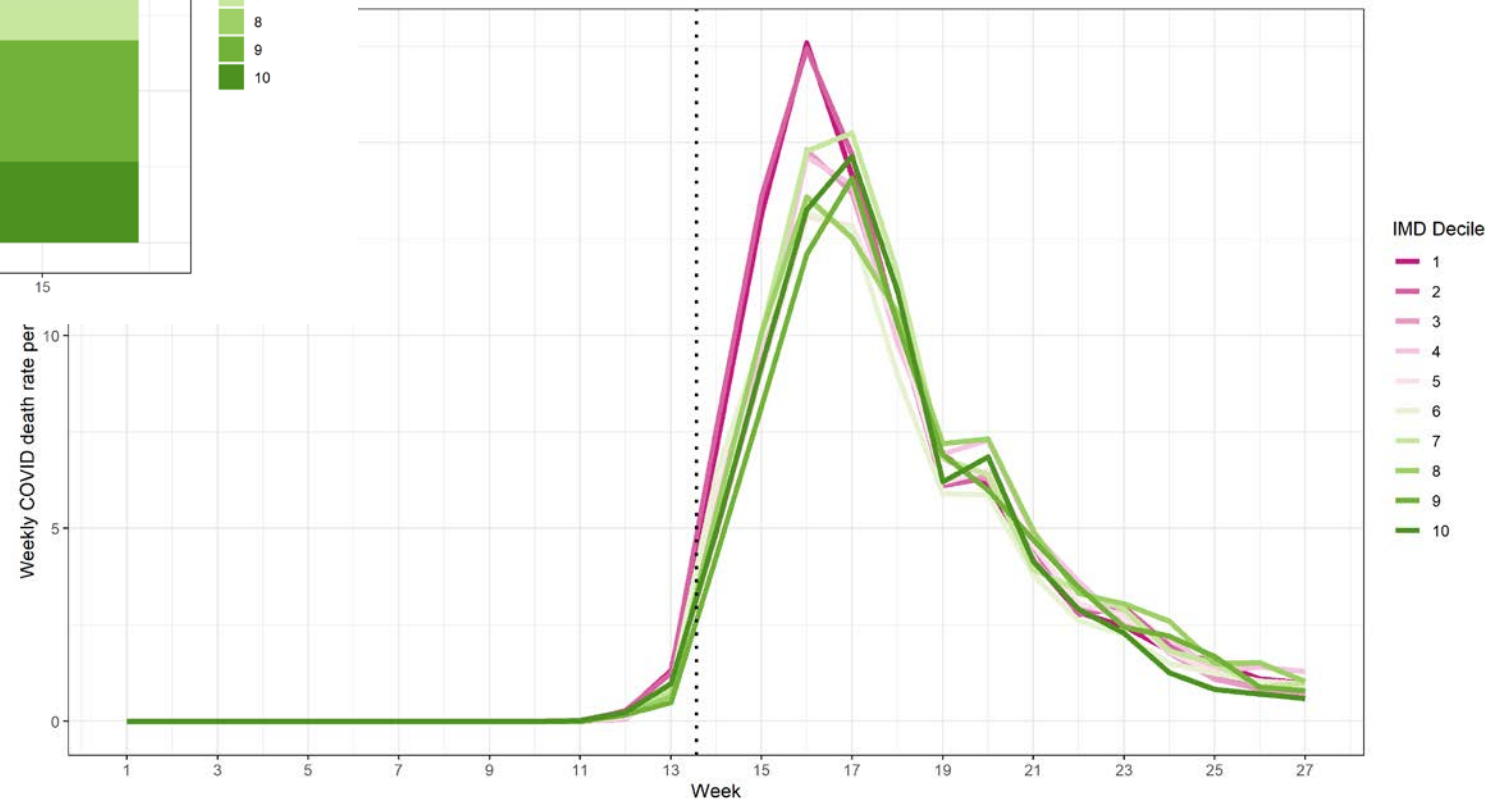


Wave 1 in England (to 4th July 2020), more deprived areas

- Began recording deaths earlier
- Death rates rose faster
- Peaked higher

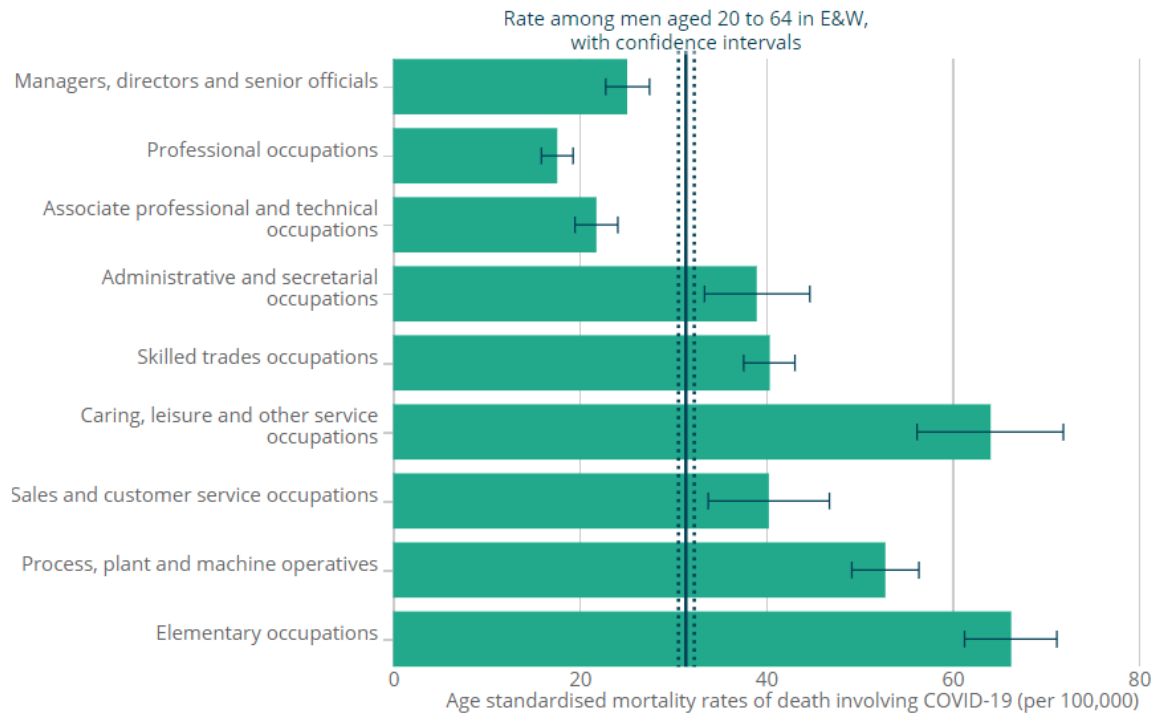
First National Lockdown (strict)

- Before lockdown, deciles 1 and 2 recorded 156% of the deaths in deciles 9 and 10
- By the end of lockdown, this had reduced to 116%



Occupation

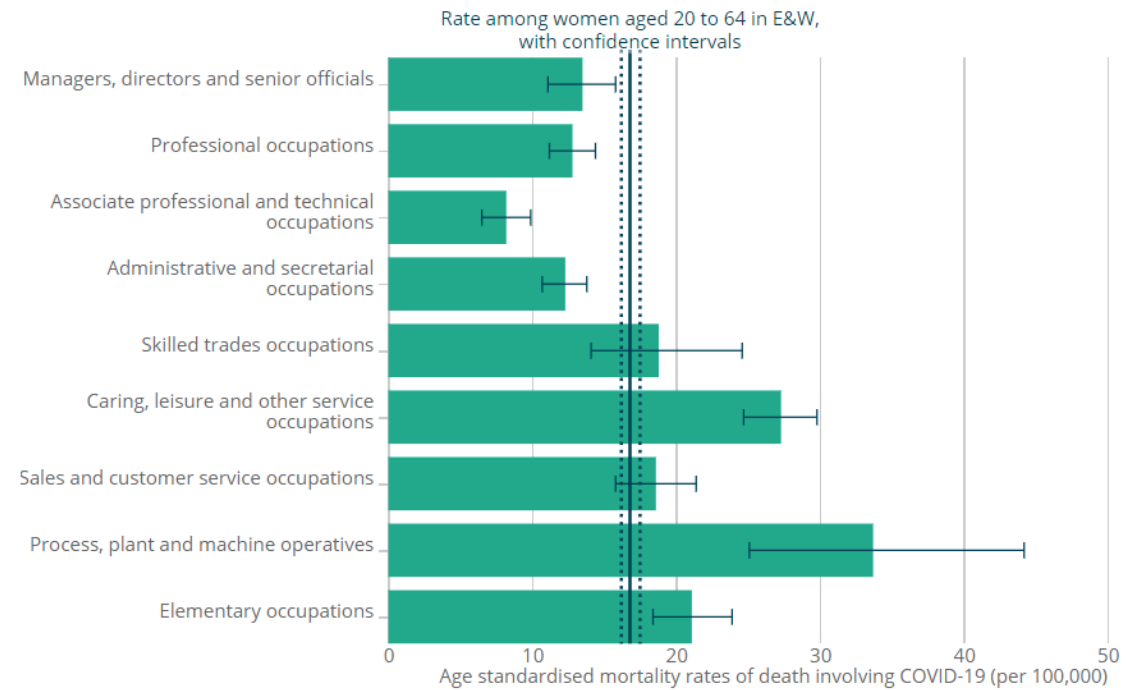
Age-standardised mortality rates of death involving the coronavirus (COVID-19) in England and Wales, by major occupational group, deaths registered between 9 March and 28 December 2020



Source: Office for National Statistics - Deaths registered in England and Wales

Men:

Age-standardised mortality rates of death involving the coronavirus (COVID-19) in England and Wales, deaths registered between 9 March and 28 December 2020



Source: Office for National Statistics - Deaths registered in England and Wales

Women:

Ethnicity

Ethnic category ~	Deaths (week 27 onwards*)	Age-adjusted mortality rate** (95% CI) (week 27 onwards*)	Deaths (March 2021)	Age-adjusted mortality rate** (95% CI) (March 2021)
White/ White British	77,984	152.8 (129.7-179.3)	7,492	137.8 (115.9-163.0)
Black / Black British	2,200	281.9 (250.0-316.9)	479	564.5 (518.4-612.5)
Asian / Asian British	5,950	379.4 (341.8-419.1)	719	387.9 (350.3-428.6)
Mixed	445	176.3 (151.0-204.0)	60	218.2 (190.0-248.9)
Other±	1,394	745.8 (693.4-801.5)	220	1167.3 (1101.0-1235.9)
Unknown	1,472	-	117	-

England - June 2020 to March 2021:

- White or White British (c150 per 100,000)
- Black/Black British (c280 per 100,000)
- Asian or Asian British (c380 per 100,000)

Source: PHE

Ghosts of Past Pandemics

- ❑ Data from Norway, Sweden, and USA shows inequalities in the 1918 Spanish flu epidemic
- ❑ Higher incidence and mortality amongst the working classes, unemployed and lower occupational groups
- ❑ Urban–rural divide in England and Wales with mortality 30–40% higher in urban areas

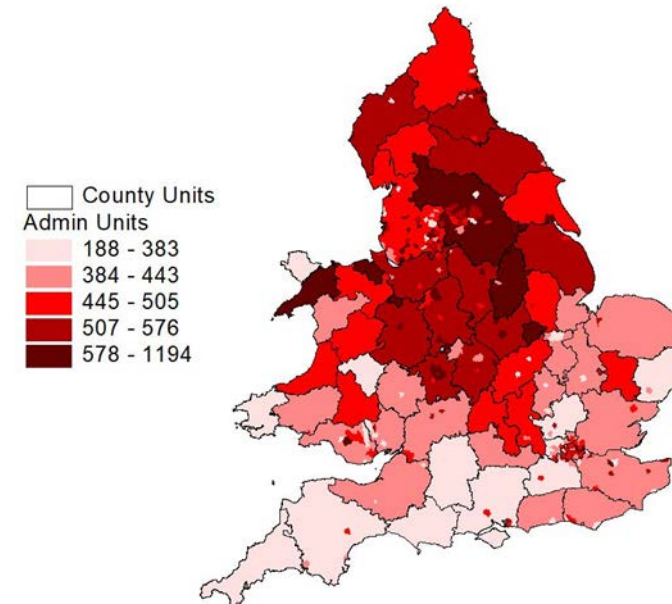


Regional Inequalities in 1918 Pandemic

English towns with highest and lowest death rates from the 1918 Spanish Flu

Mortality Rates per 100,000 population, 1918

Town	County	Region	Death Rate per 100,000
Highest Rates			
Hebburn	Durham	North	1194
Jarrow	Durham	North	877
Kidderminster	Worcestershire	Midlands	849
Barnsley	Yorkshire	North	835
Wallsend	Northumberland	North	828
Lowest Rates			
Hereford	Herefordshire	South	277
Sutton	Surrey	South	188
Woking	Surrey	South	225
Winchester	Hampshire	South	250
Taunton	Somerset	South	272



Source Bambra et al, 2021

Inequalities in 2009 H1N1 Swine Flu

- ❑ H1N1 mortality in England was 3-times higher in the most deprived quintile compared to least deprived
- ❑ Higher in urban compared to rural areas of England
- ❑ Canada: H1N1 hospitalisation rates associated with lower educational attainment and deprivation
- ❑ USA: positive associations between people with financial issues and H1N1

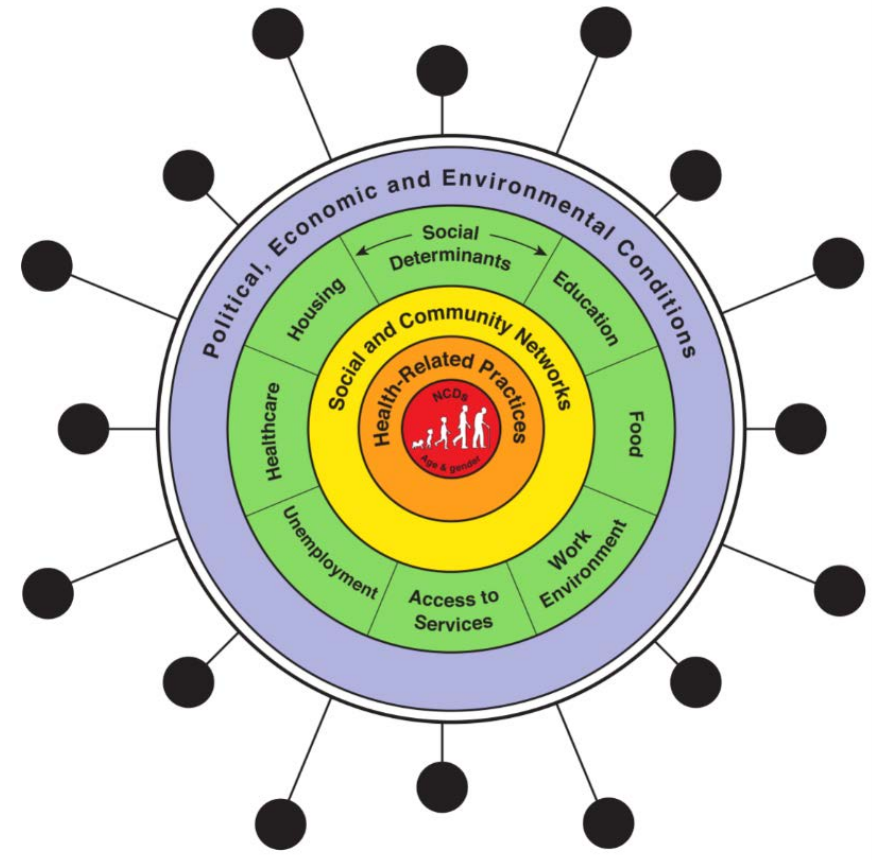
Quintile	Mortality rate (95% CI) (deaths per million people)	RR (95% CI)
5 (least deprived)	3.9 (2.8–5.2)	1
4	5.3 (4.0–6.9)	1.4 (0.9–2.1)
3	5.1 (3.8–6.7)	1.3 (0.9–2.0)
2	7.8 (6.2–9.7)	2.0 (1.4–3.0)
1 (most deprived)	12.0 (9.9–14.4)	3.1 (2.2–4.4)

Source Rutter et al, 2012

A Syndemic Pandemic

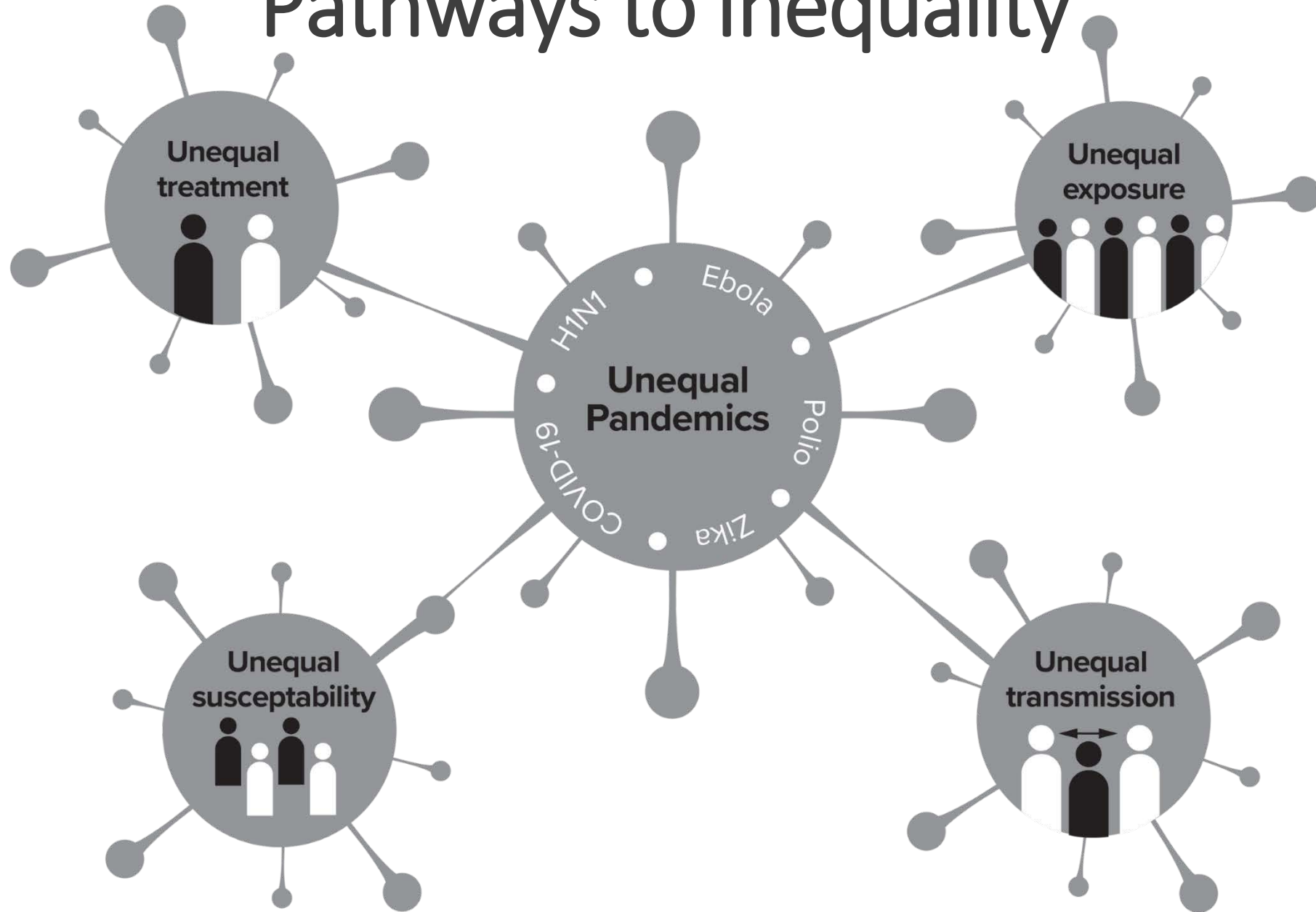
'A syndemic is a set of closely intertwined and mutual enhancing health problems that significantly affect the overall health status of a population within the context of a perpetuating configuration of noxious social conditions'

Merrill Singer



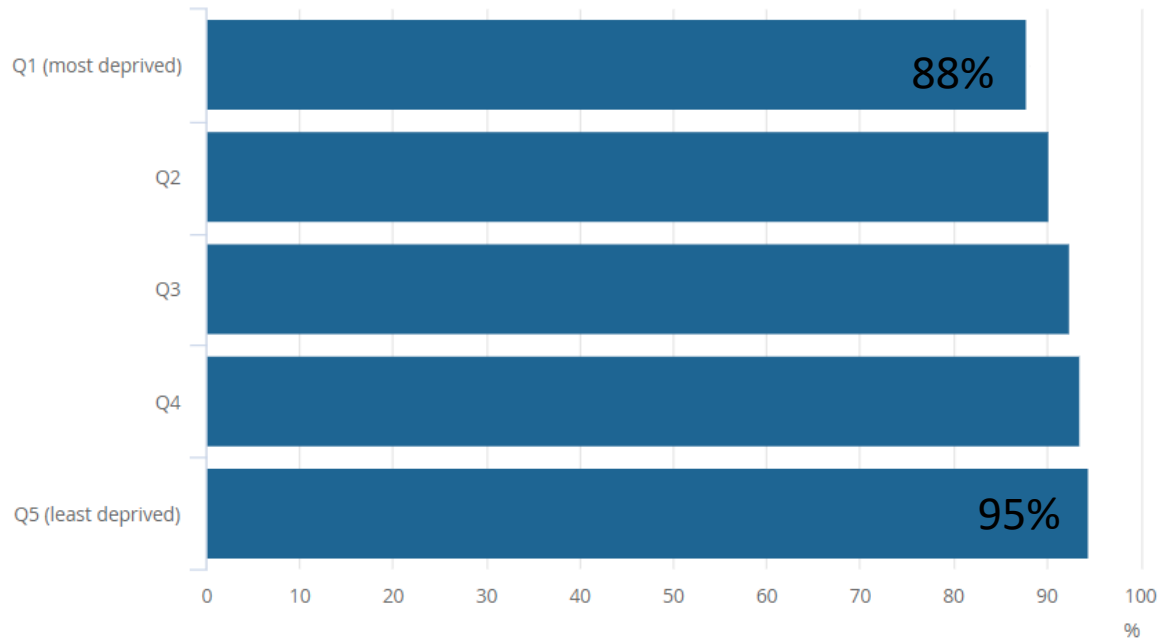
The Syndemic of Covid-19, Non-Communicable Diseases (NCDs) and the Social Determinants of Health (source: Bambra et al, 2020)

Pathways to Inequality



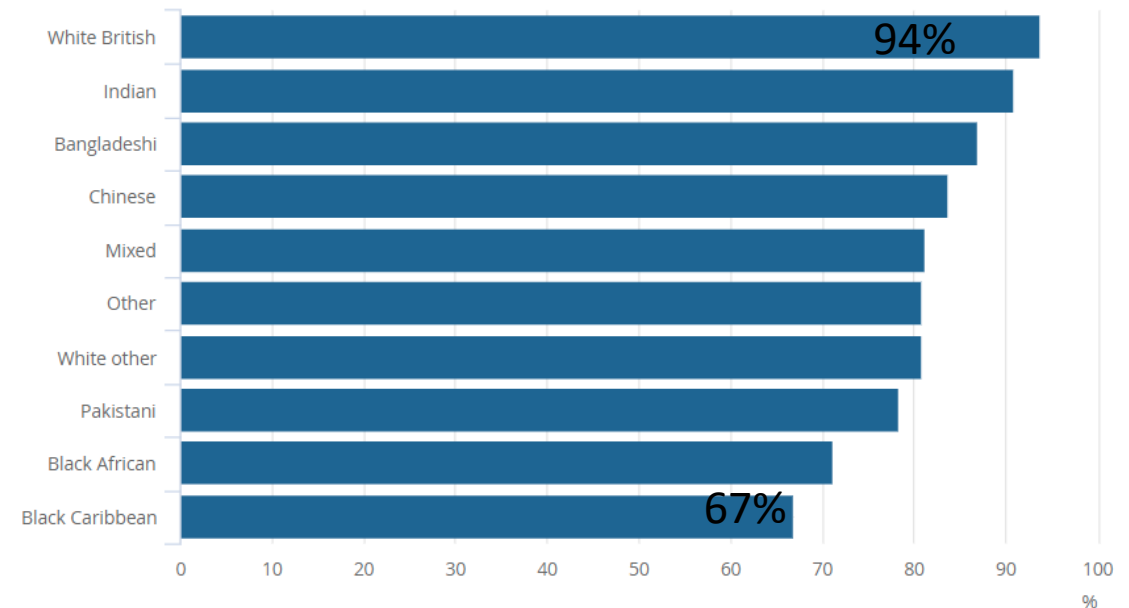
Unequal Vaccines - Inverse Equity

Vaccination rates of adults aged 50 years and over, by quintile of Index of Multiple Deprivation, 8 December 2020 to 12 April 2021, England



7 percentage point gap

Vaccination rates of adults aged 50 years and over, by self-reported ethnic group, 8 December 2020 to 12 April 2021, England

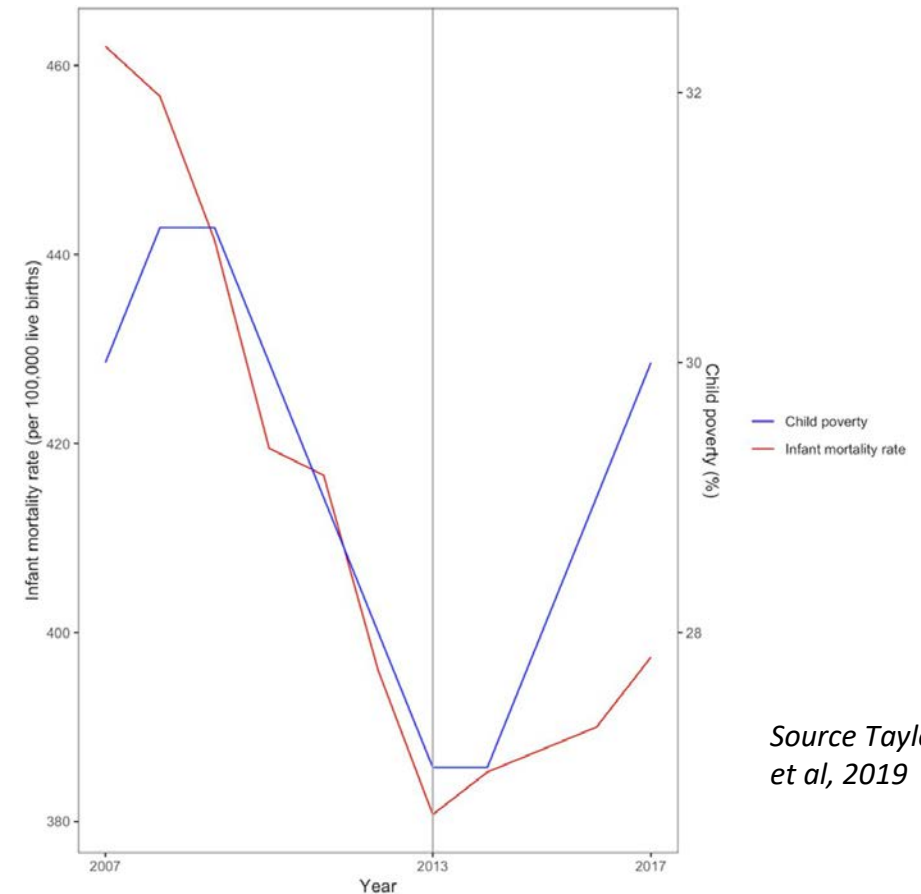


27 percentage point gap

Source ONS, 2021

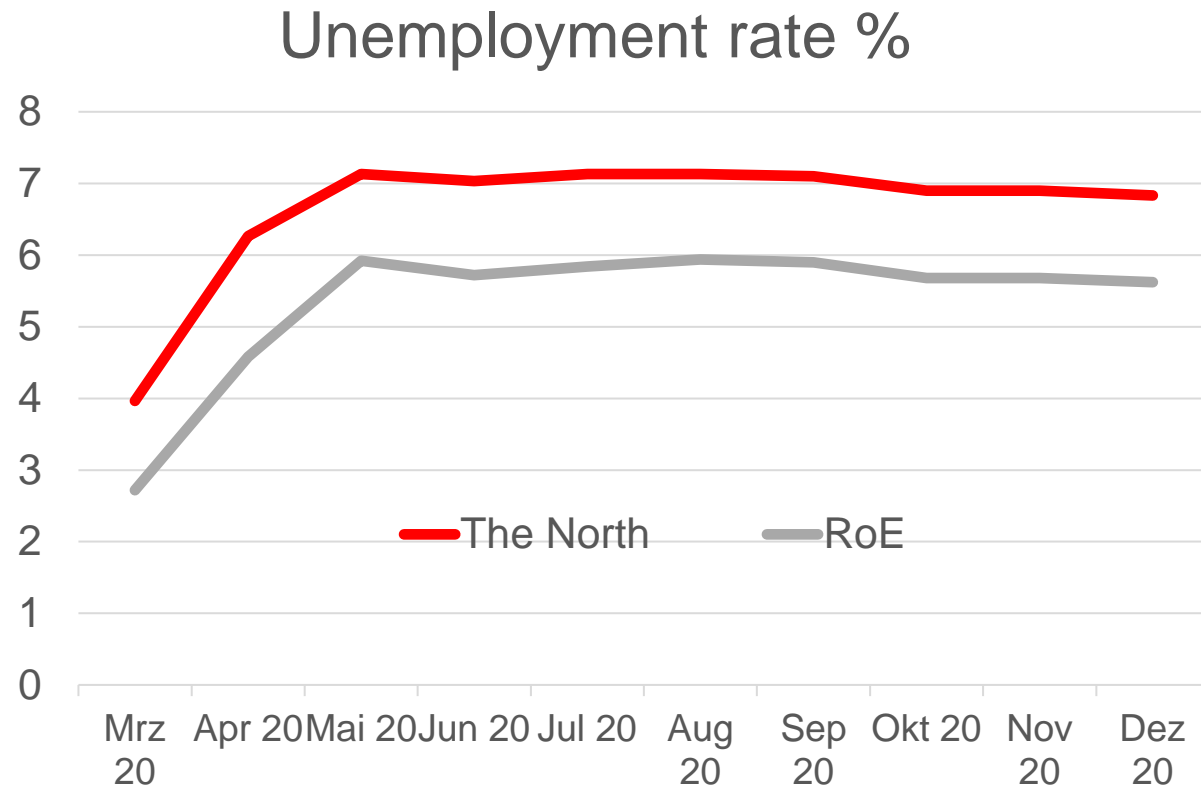
Economic Impacts of COVID-19

- ❑ 2020 saw record levels of unemployment: 5.2 million people filed for unemployment benefit in just one week in April 2020 in the USA, predicted unemployment rates of 10% in UK by 2022
- ❑ Increased rates of child poverty (now 40% in Middlesbrough)
- ❑ Economic impact could be greater than the global financial crisis of 2007/8 and possibly worse than the Great Depression of the 1930s
- ❑ Furlough schemes protected ... for now



Source Taylor-Robinson et al, 2019

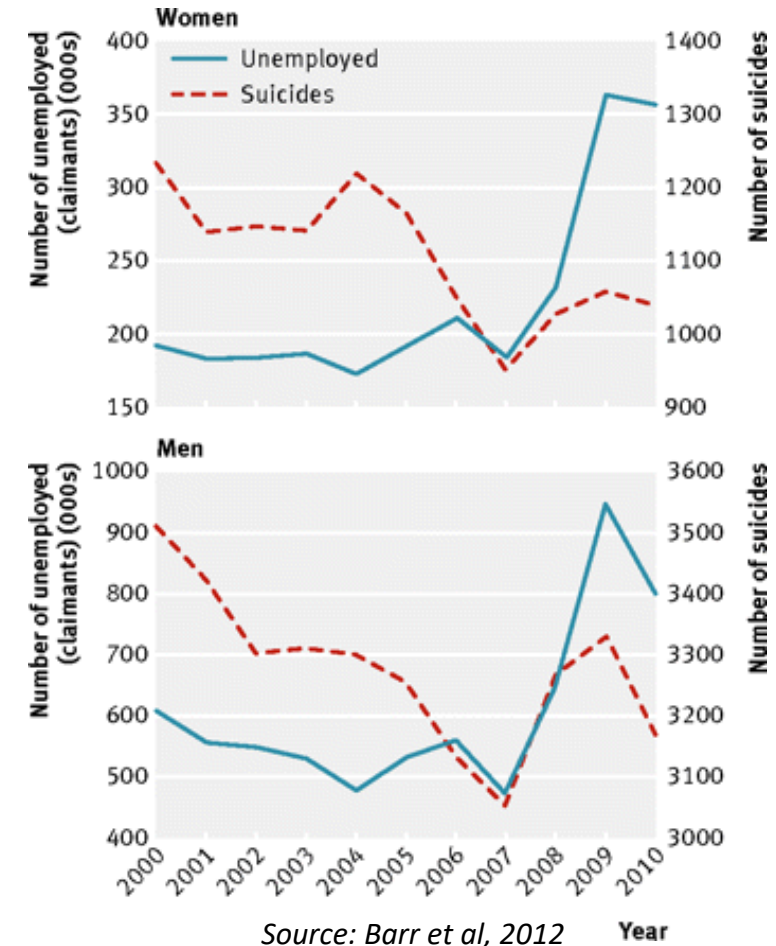
Crisis Worse in More Deprived Areas



Source: NHA COVID-19 in North v2, 2021

Unequal Health Impacts

- ❑ Previous economic recessions have led to increases in physical and psychological morbidity and mortality
- ❑ Unemployment associated with increased morbidity and mortality
- ❑ Not shared equally – after GFC, areas with higher unemployment rates had greater increases in suicide rates
- ❑ Inequalities increased with people living in the most deprived areas experiencing the largest increases in poor mental health and self-harm



Social Safety Nets Matter

- ❑ Unequal economic fall-out can be mitigated by policy - much depends on how governments choose to respond
- ❑ Effects of the GFC on health inequalities worse in countries such as the UK, Greece, Italy and Spain who imposed austerity
- ❑ Countries with higher rates of social protection have smaller/no increases in health inequalities during economic recessions
- ❑ Inequalities decrease during welfare expansion (e.g. USA, New Labour) and increase in welfare contraction (e.g. 1980s USA, NZ and UK).



Levelling Up & Building Back Better?



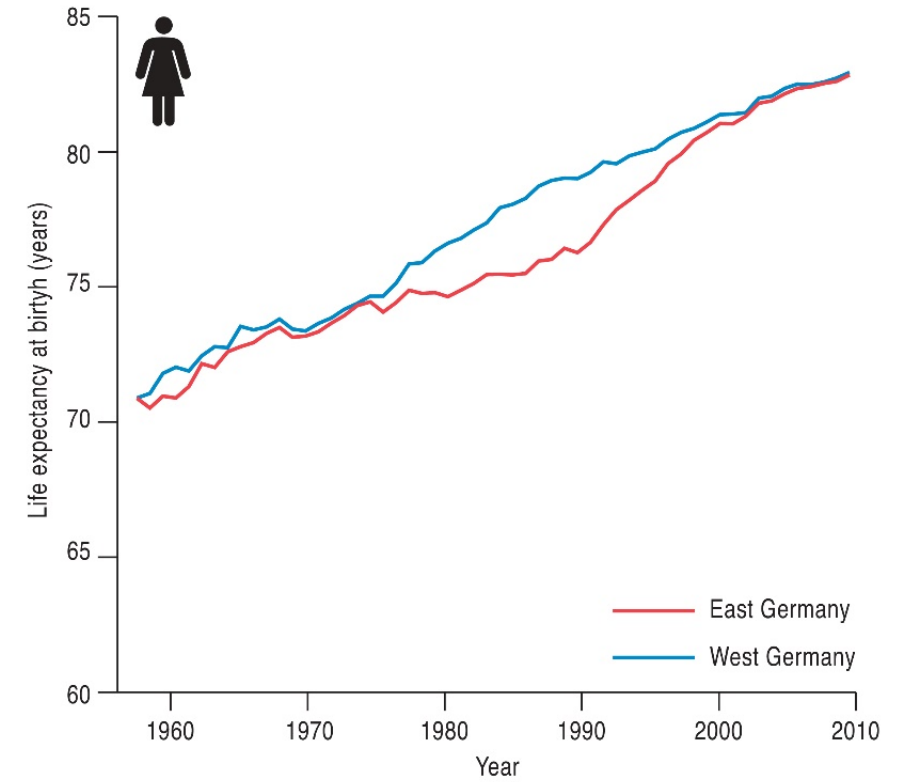
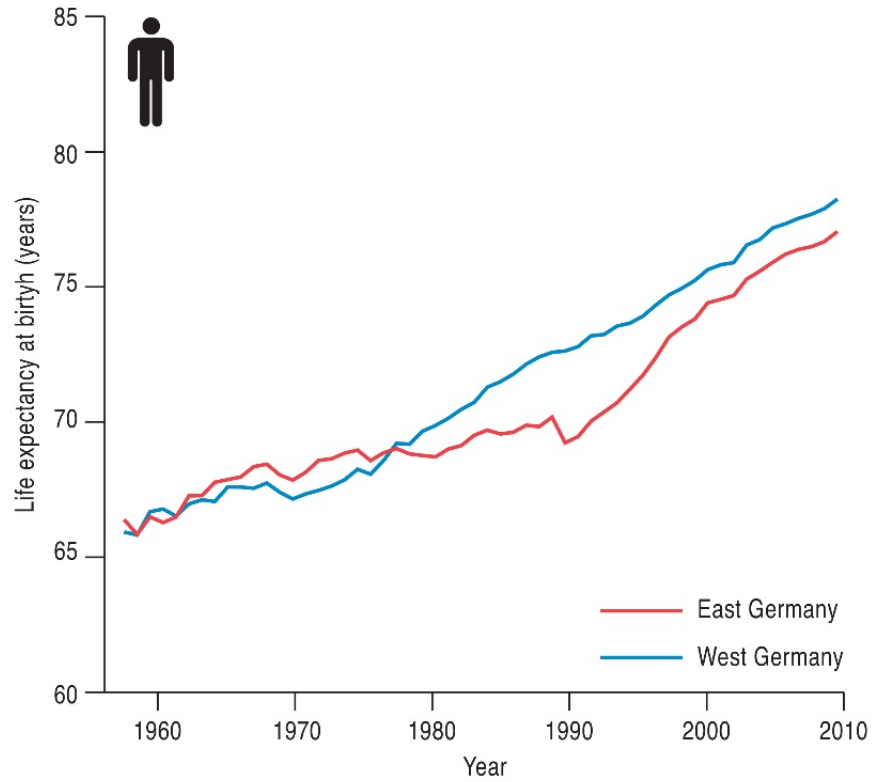
The Great Society, Civil Rights and the War on Poverty: 1960s USA

- Medicare (1965) and Medicaid (1966) programmes were introduced.
- 'War on Poverty' - initiatives to address urban and rural poverty; increased education funding; expanded Federal food stamp program; increased value of the state pension; and expanded welfare - Aid for Dependent Children
- 1964 Civil Rights Acts outlawed racial discrimination (which led to the abolition of 'Jim Crow') - desegregation of schools and public accommodations (including hospitals) and equalised voting rights.

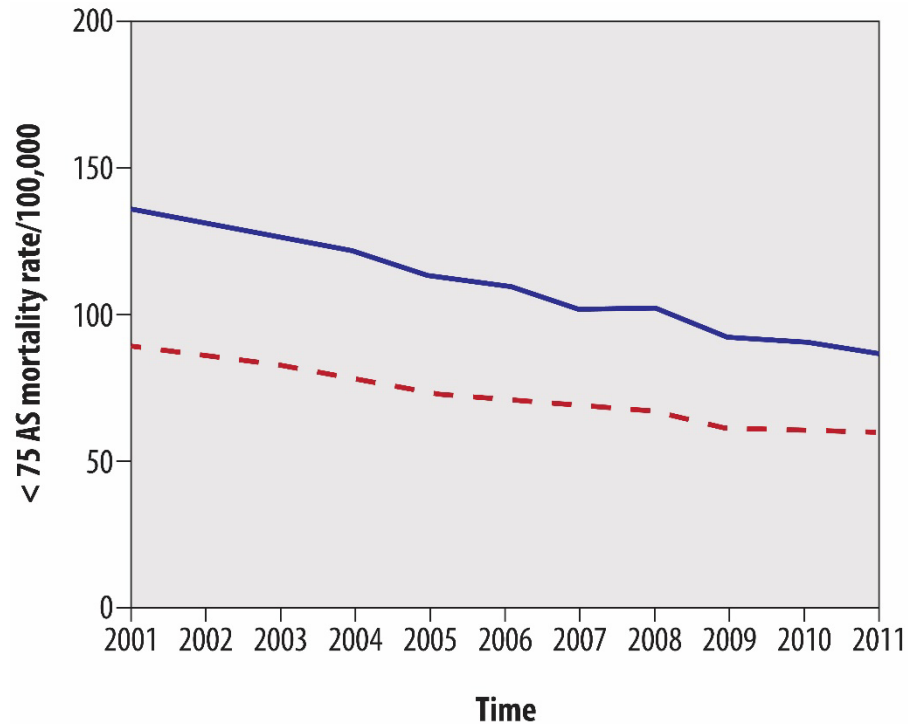


- racial and income inequalities in premature mortality and IMR declined between 1966 and 1980;
- racial inequalities in breast cancer rates decreased after 1965
- Jim Crow abolition reduced racial inequalities in premature mortality and IMR

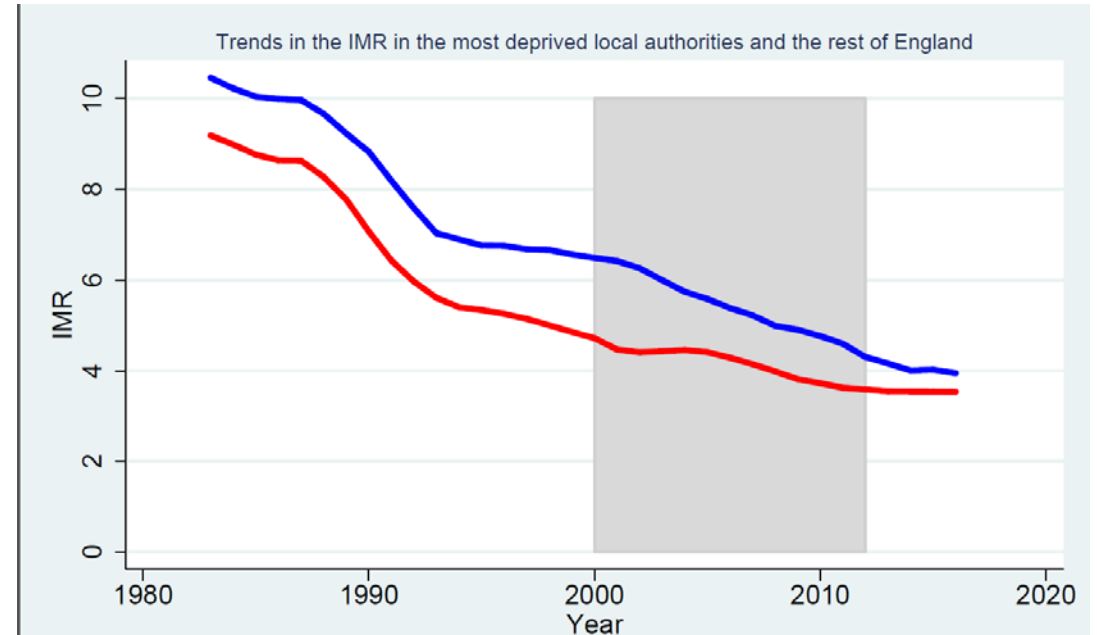
Fall of Communism and Reunification: Germany in the 1990s



National Health Inequalities Strategy: England in the 2000's



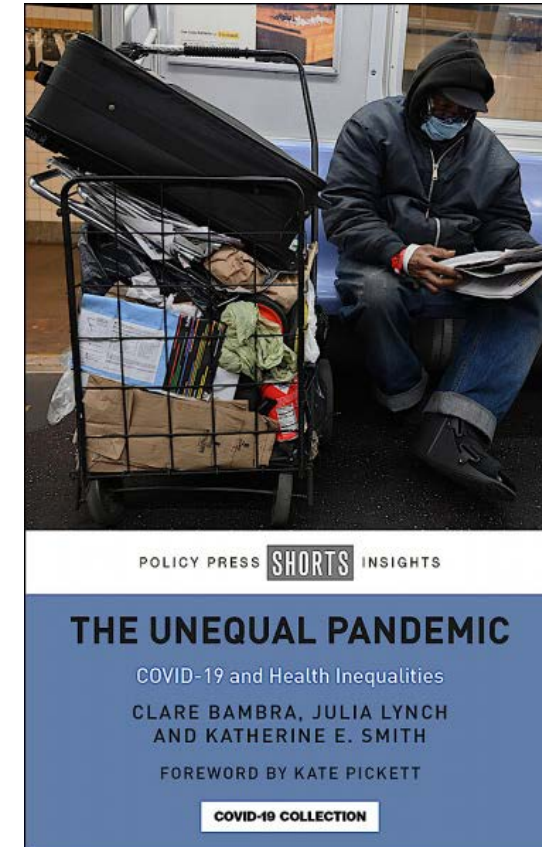
Trends in mortality amenable to health care in the most deprived local authorities and the rest of England, 2001-2011 (source Barr et al, 2014).



Trends in IMR in the most deprived local authorities and the rest of England, 1983-2017 (source Robinson et al, 2019)

Concluding Comments

- ❑ COVID-19 outcomes worse in less advantaged groups and communities
- ❑ Parallels with past pandemics
- ❑ COVID is a syndemic of NCDs, Inequality and the Social Determinants of Health
- ❑ Future economic impacts require social safety net
- ❑ Building back better – can learn from past levellers (health care, welfare, incorporation)
- ❑ Long term prevention action needed on inequalities in NCDs



<https://policy.bristoluniversitypress.co.uk/the-unequal-pandemic>

Further Reading

- Bambra, C., Lynch, J., Smith, K.E. (2021) Unequal Pandemic: COVID-19 and Health Inequalities, Bristol, Policy Press
<https://policy.bristoluniversitypress.co.uk/the-unequal-pandemic>
- Bambra, C. (2021) Levelling Up: Global Examples of Reducing Health Inequalities, Scandinavian Journal of Public Health,
<https://doi.org/10.1177/14034948211022428>
- Todd, A. and Bambra, C. (2021) Learning from past mistakes? The COVID-19 Vaccine and the Inverse Equity Hypothesis, European Journal of Public Health, <https://doi.org/10.1093/eurpub/ckaa243>
- Bambra, C. et al (2021) Visualising Regional Inequalities in the 1918 Spanish Flu Pandemic in England and Wales, Environment and Planning A: Space and Economy, 53:607-11,
<https://doi.org/10.1177/0308518X20969420>
- Bambra, C. et al (2020) The COVID-19 pandemic and health inequalities, *J Epidemiol Community Health*,
<http://dx.doi.org/10.1136/jech-2020-214401>

