indie_SAGE
The Independent SAGE • Following the science

Latest numbers on COVID-19 in the UK – 26th February 2021

Things are continuing to get better, but rate of reduction in infections is slowing. The impact of inequality is still stark.

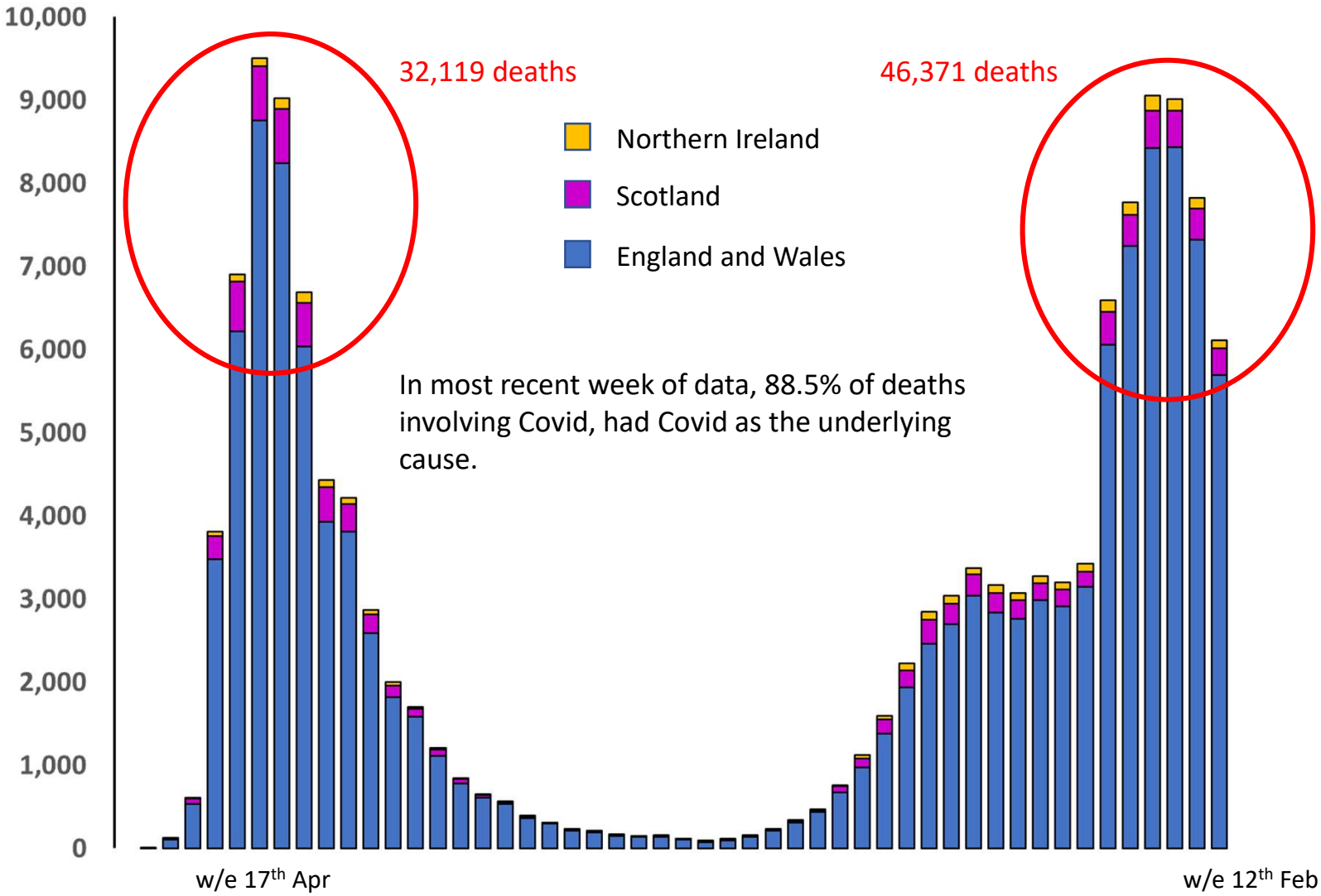
1. Deaths
2. Hospitalisations
3. Cases
4. Vaccinations
5. Inequality

With many thanks to Bob Hawkins and Catherine Finnecy for their help in collating the data and discussions on interpretation.

Deaths

indie_SAGE
The Independent SAGE • Following the science

Number of new UK deaths from COVID-19 registered per week, to 12th February

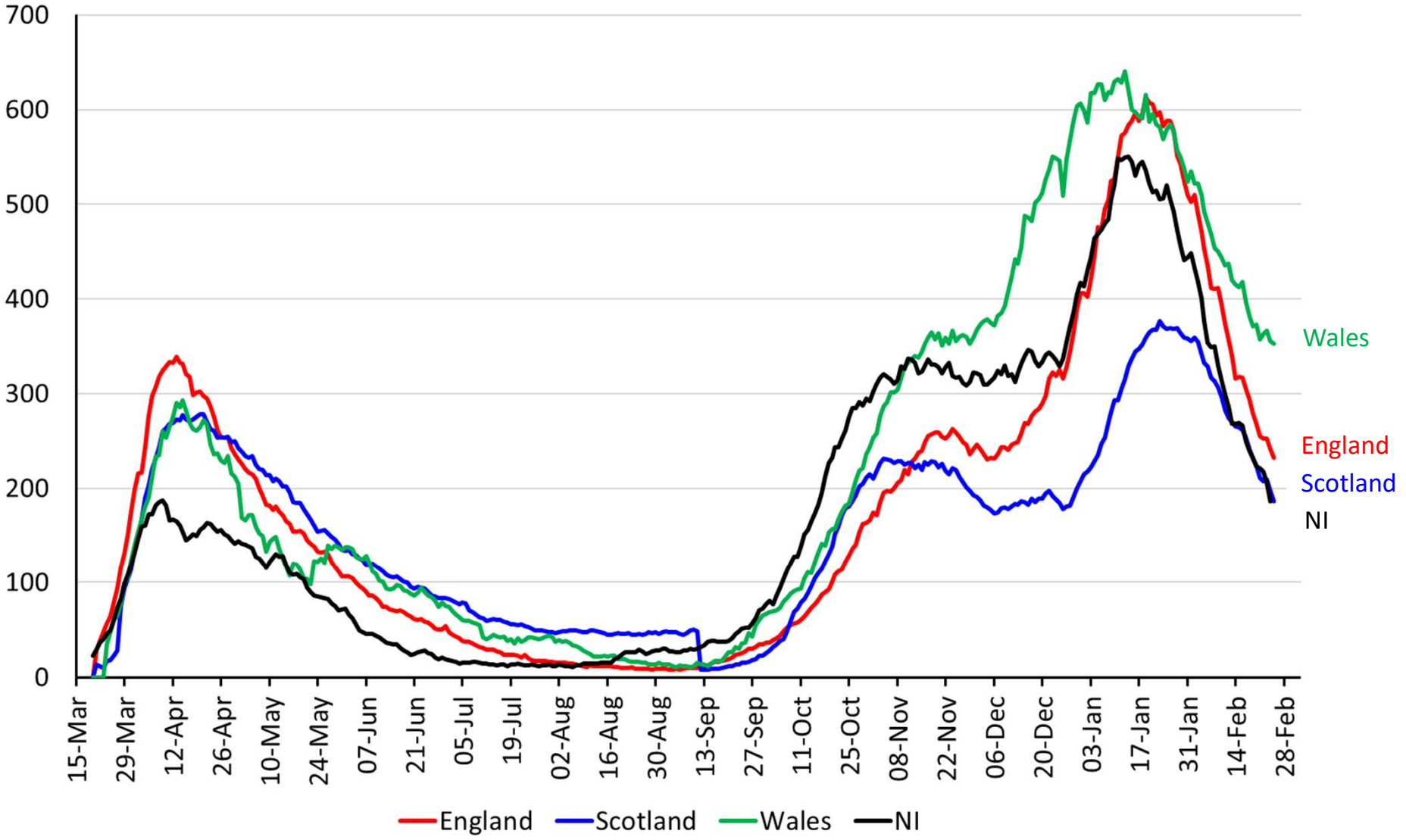


Data from :
England and Wales: www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsregisteredweeklyinenglandandwalesprovisional/latest
Scotland: https://data.gov.scot/coronavirus-covid-19/detail.html
Northern Ireland: www.nisra.gov.uk/publications/weekly-deaths

Hospitalisations

indie_SAGE
The Independent SAGE • Following the science

Number of people in hospital per million people – UK nations

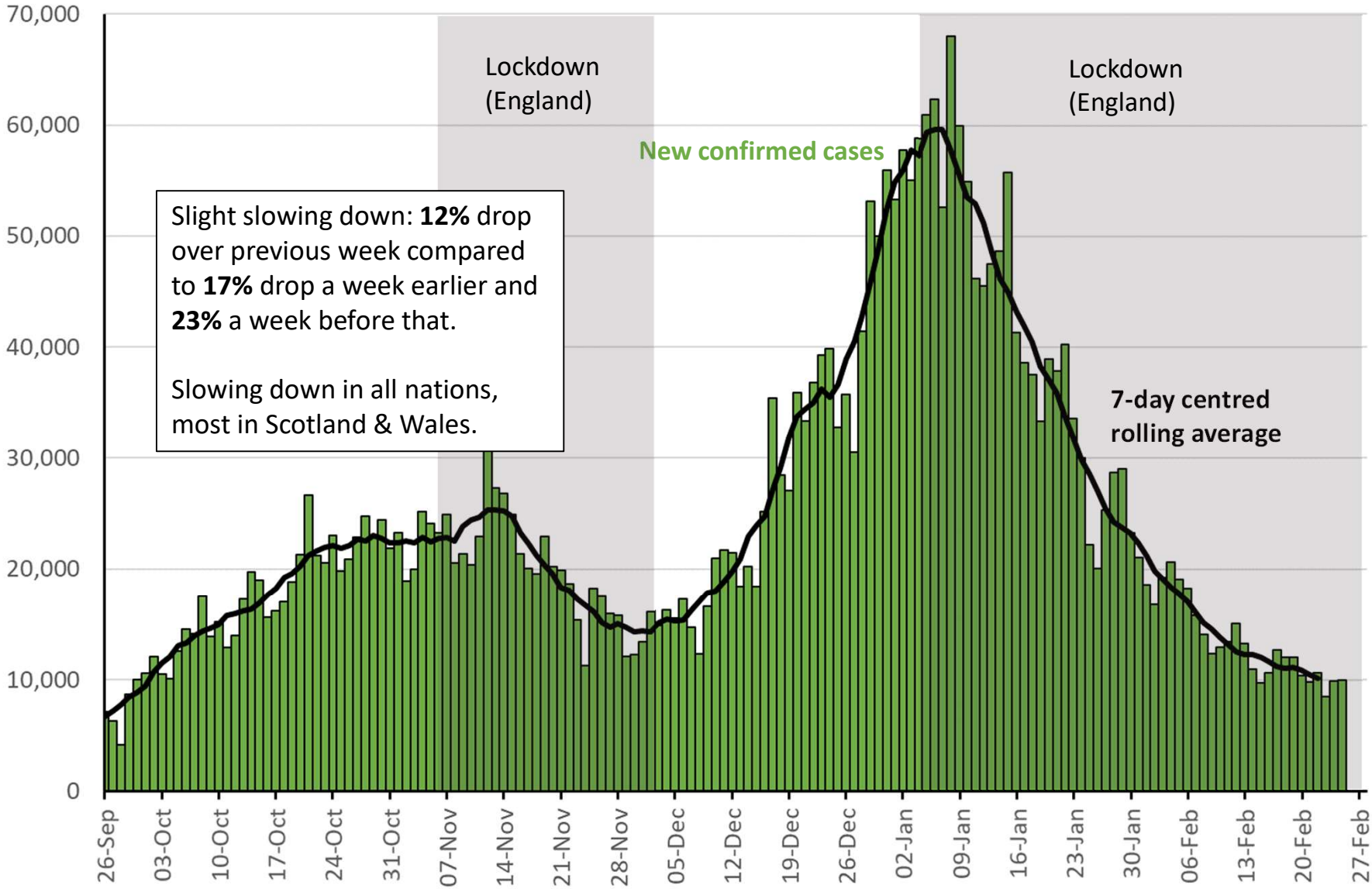


Data from https://coronavirus.data.gov.uk.

Cases

indie_SAGE
The Independent SAGE • Following the science

Number of new UK confirmed COVID-19 cases by reported date (people who have had a positive test)



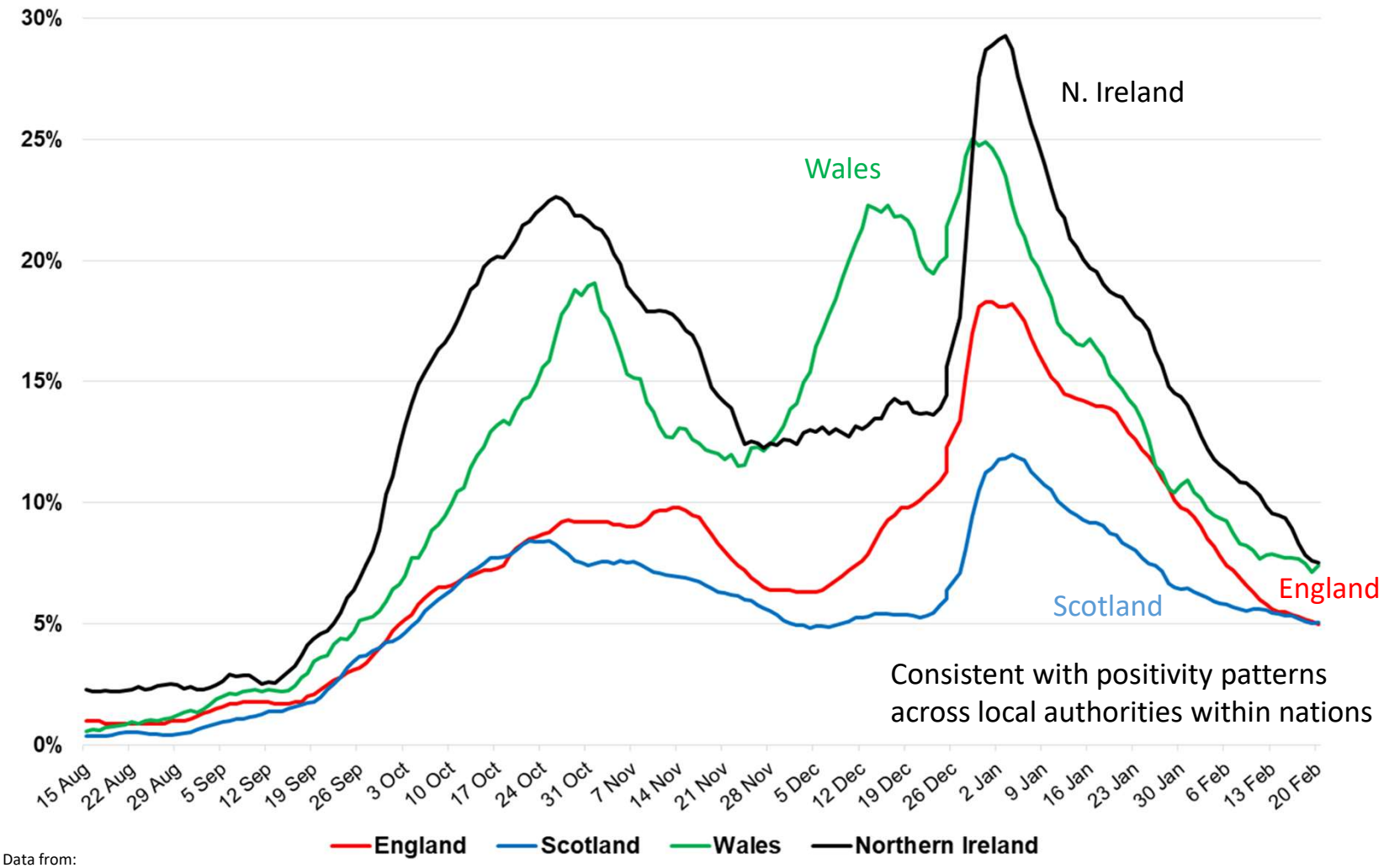
Data from https://coronavirus.data.gov.uk

indie_SAGE
The Independent SAGE • Following the science

Positivity rates – UK nations – by date of test to 20th February

All rates are calculated based on PCR tests only and are comparable across the Home Nations

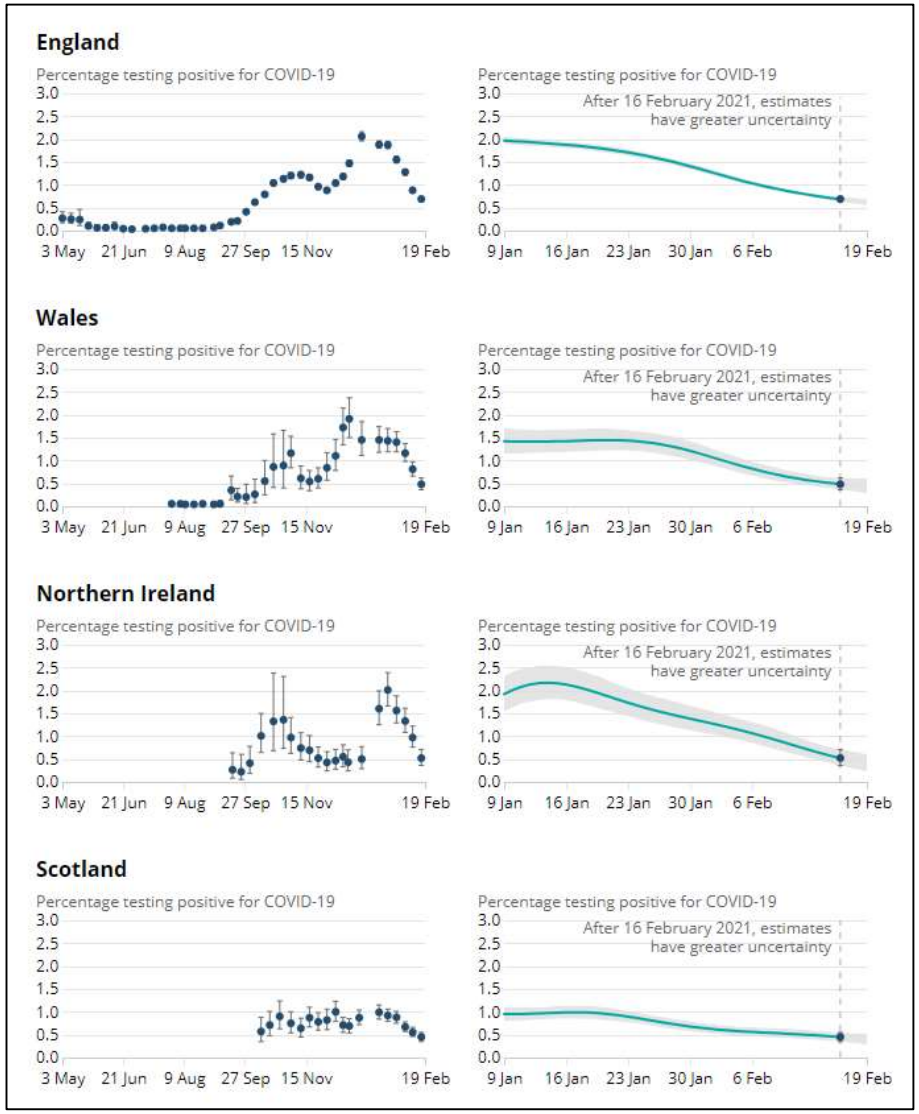
% of people tested who are positive



Data from:
Scotland: https://www.opendata.nhs.scot/dataset/covid-19-in-Scotland
Wales: https://public.tableau.com/profile/public.health.wales.health.protection#!/vizhome/RapidCOVID-19virology-Public/Headlinesummary
NI: https://www.health-ni.gov.uk/publications/daily-dashboard-updates-covid-19-november-2020
England: https://coronavirus.data.gov.uk . ONS https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronaviruscovid19infectionsurveypilot/latest

Visualisation courtesy of Bob Hawkins

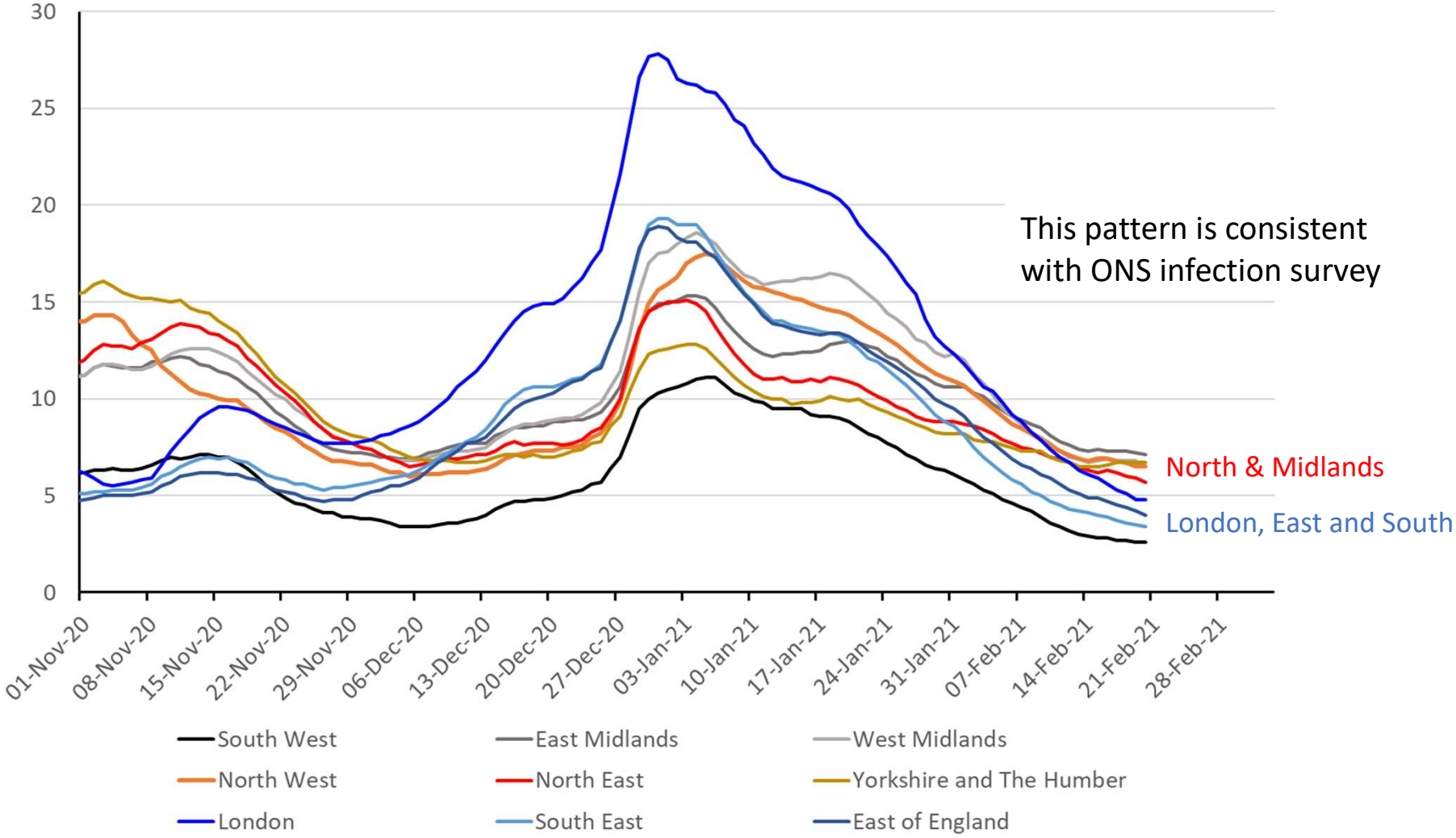
Percentage testing positive from ONS infection survey (to 19th Feb)



Graph fromhttps://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronaviruscovid19infectionsurveypilot/latest

Positivity rates – English regions – by date of test to 20th February

% of people tested who are positive



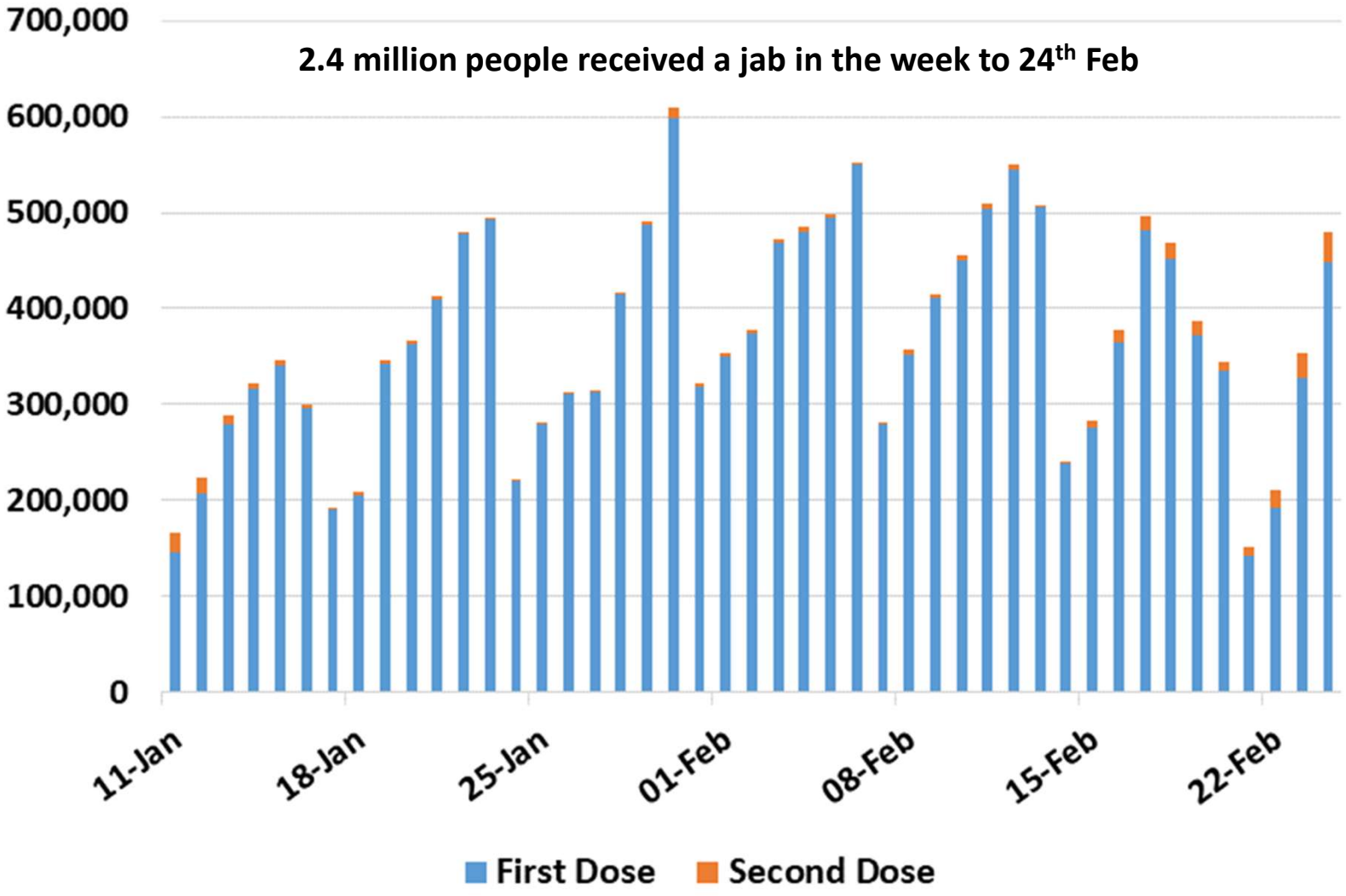
Data from:
Scotland: https://www.opendata.nhs.scot/dataset/covid-19-in-Scotland
Wales: https://public.tableau.com/profile/public.health.wales.health.protection#!/vizhome/RapidCOVID-19virology-Public/Headlinesummary
NI: https://www.health-ni.gov.uk/publications/daily-dashboard-updates-covid-19-november-2020
England: https://coronavirus.data.gov.uk . ONS https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronaviruscovid19infectionsurveypilot/latest

Visualisation courtesy of Bob Hawkins

Vaccination data

indie_SAGE
The Independent SAGE • Following the science

Number of 1st and 2nd doses given by day in the UK to 24th February

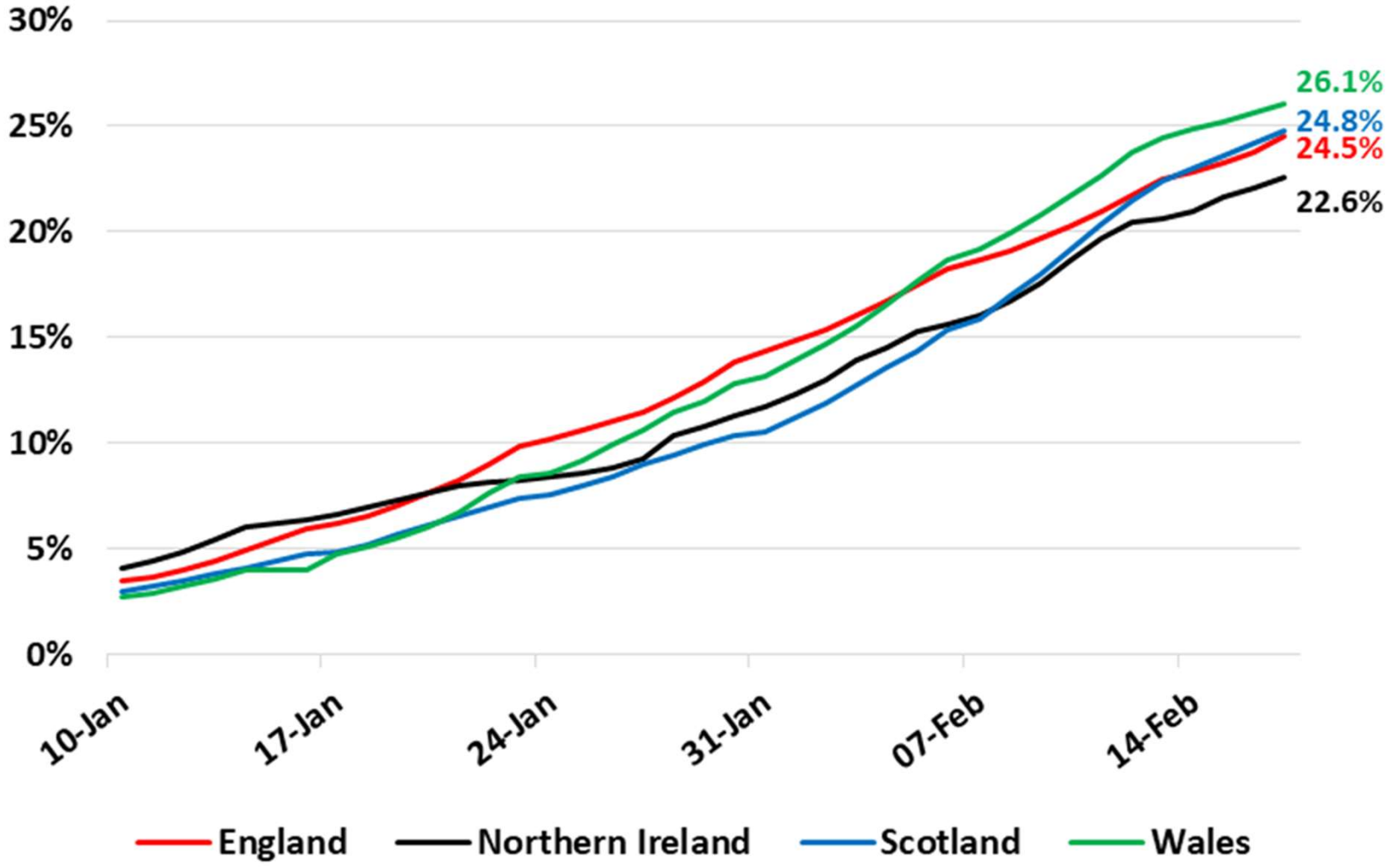


Data from https://coronavirus.data.gov.uk/

Thanks to Bob Hawkins for the chart

indie_SAGE
The Independent SAGE • Following the science

Proportion of people who have received at least 1 dose over time for each nation to 17th February



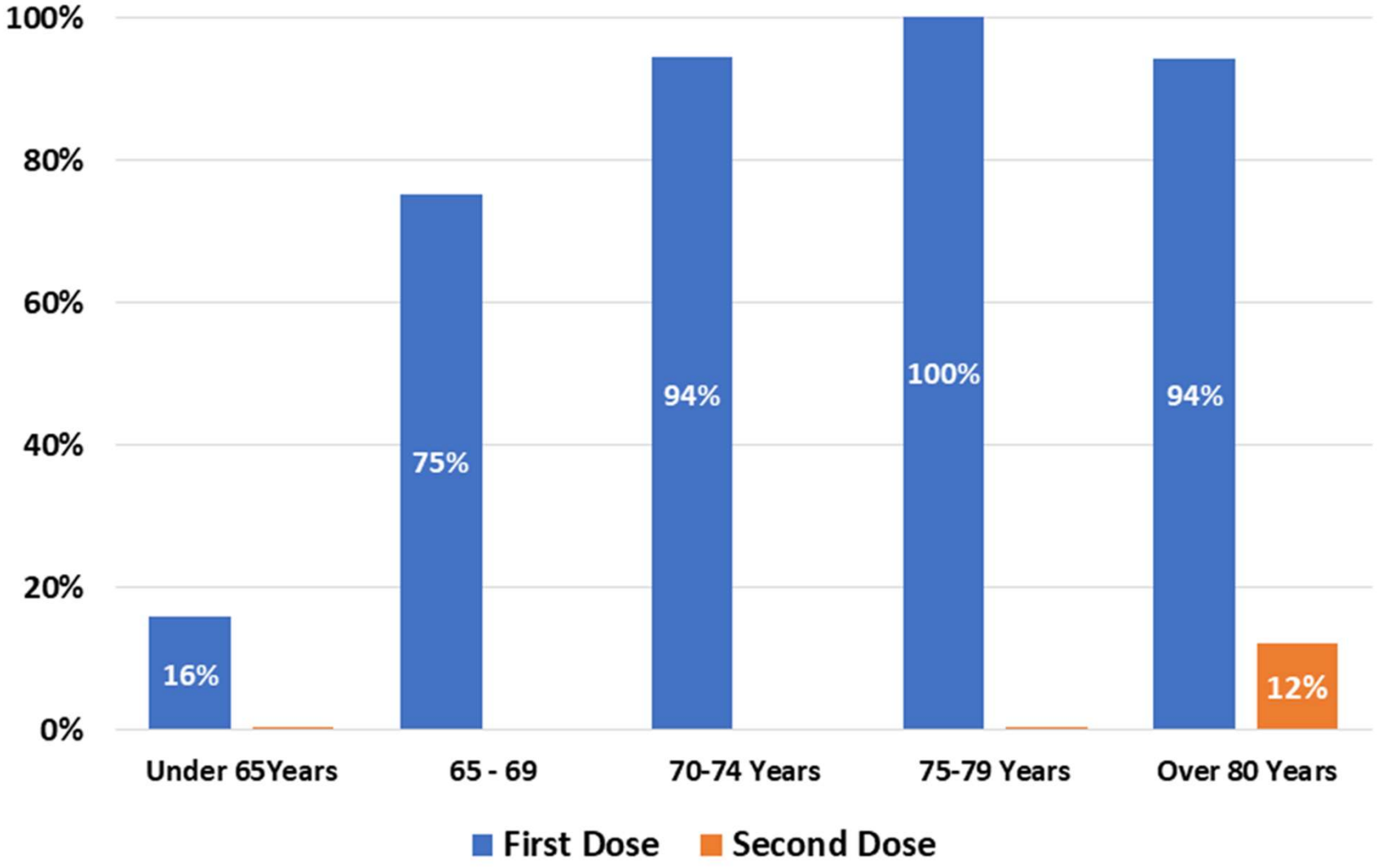
Data from https://coronavirus.data.gov.uk/

Thanks to Bob Hawkins for the chart

indie_SAGE
The Independent SAGE • Following the science

Population coverage by age to 21st February

NOTE: percentages are based on population estimates which are **not** perfect



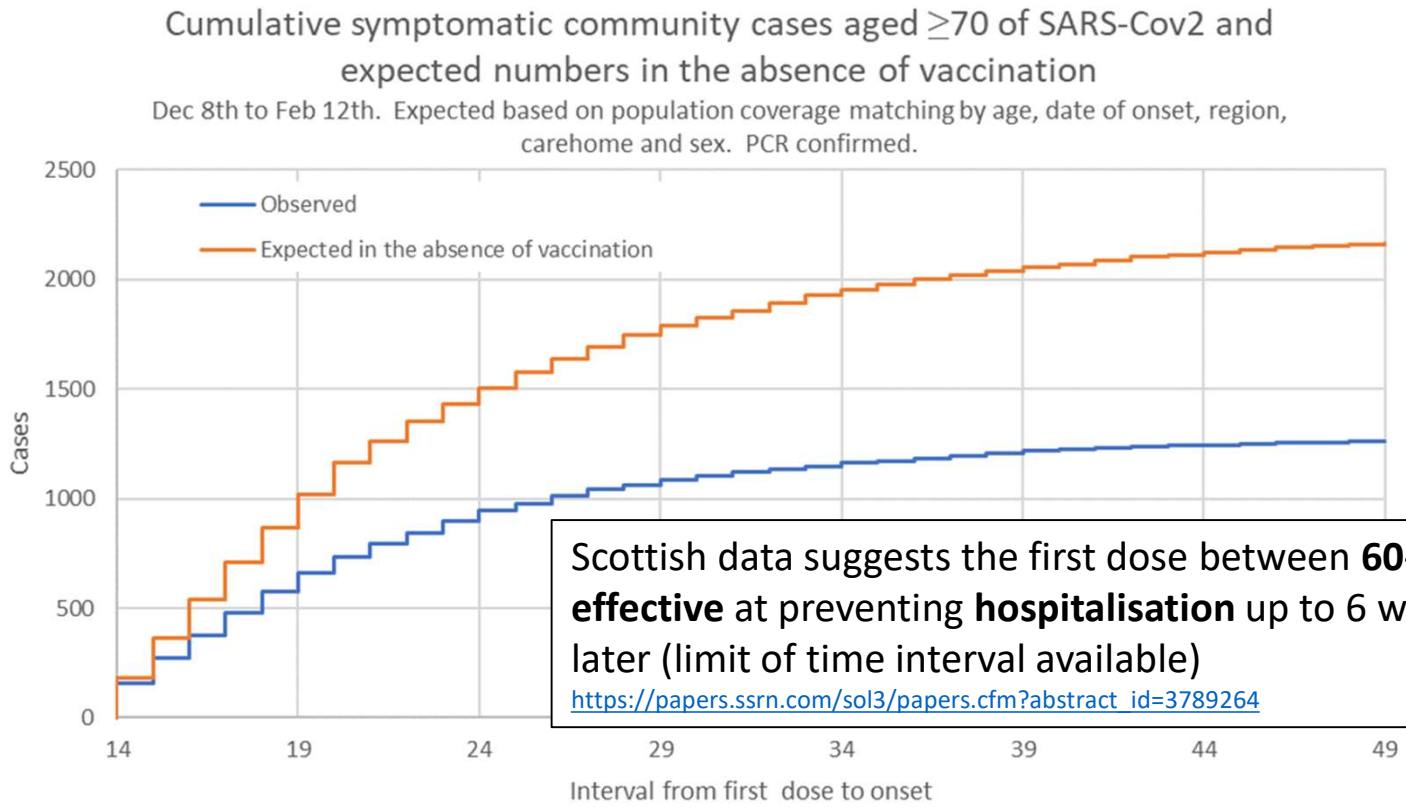
Data & population estimates from https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-vaccinations/

Thanks to Bob Hawkins for the chart

Vaccine impact

Public Health Scotland and Public Health England have released preliminary findings of vaccine efficacy.

Figure 1: Cumulative observed PCR confirmed cases and expected* cases in the absence of vaccination for age >=70, Pfizer vaccine.



Scottish data suggests the first dose between **60-75% effective** at preventing **hospitalisation** up to 6 weeks later (limit of time interval available)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3789264

Graph from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/963532/COVID-19_vaccine_effectiveness_surveillance_report_February_2021_FINAL.pdf

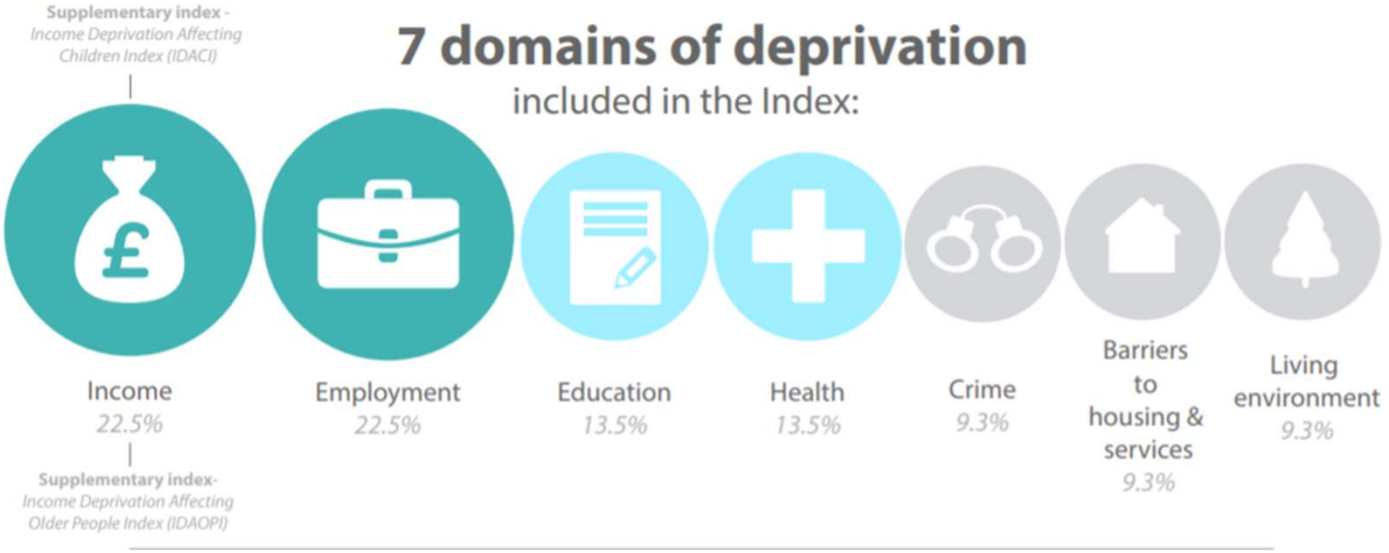
Inequality

Measuring deprivation at MSOA (neighbourhood) level

Most deprived

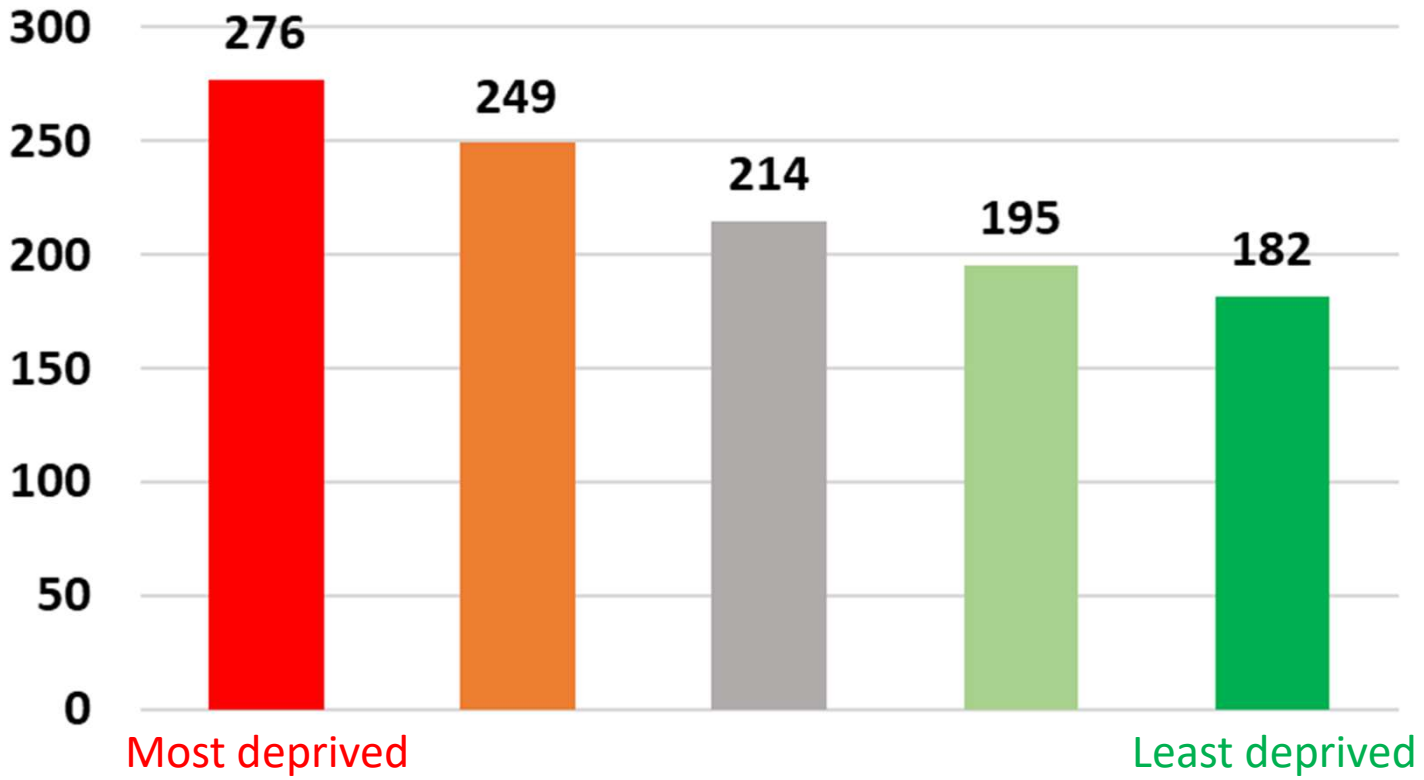
Least deprived

Population



indie_SAGE
The Independent SAGE • Following the science

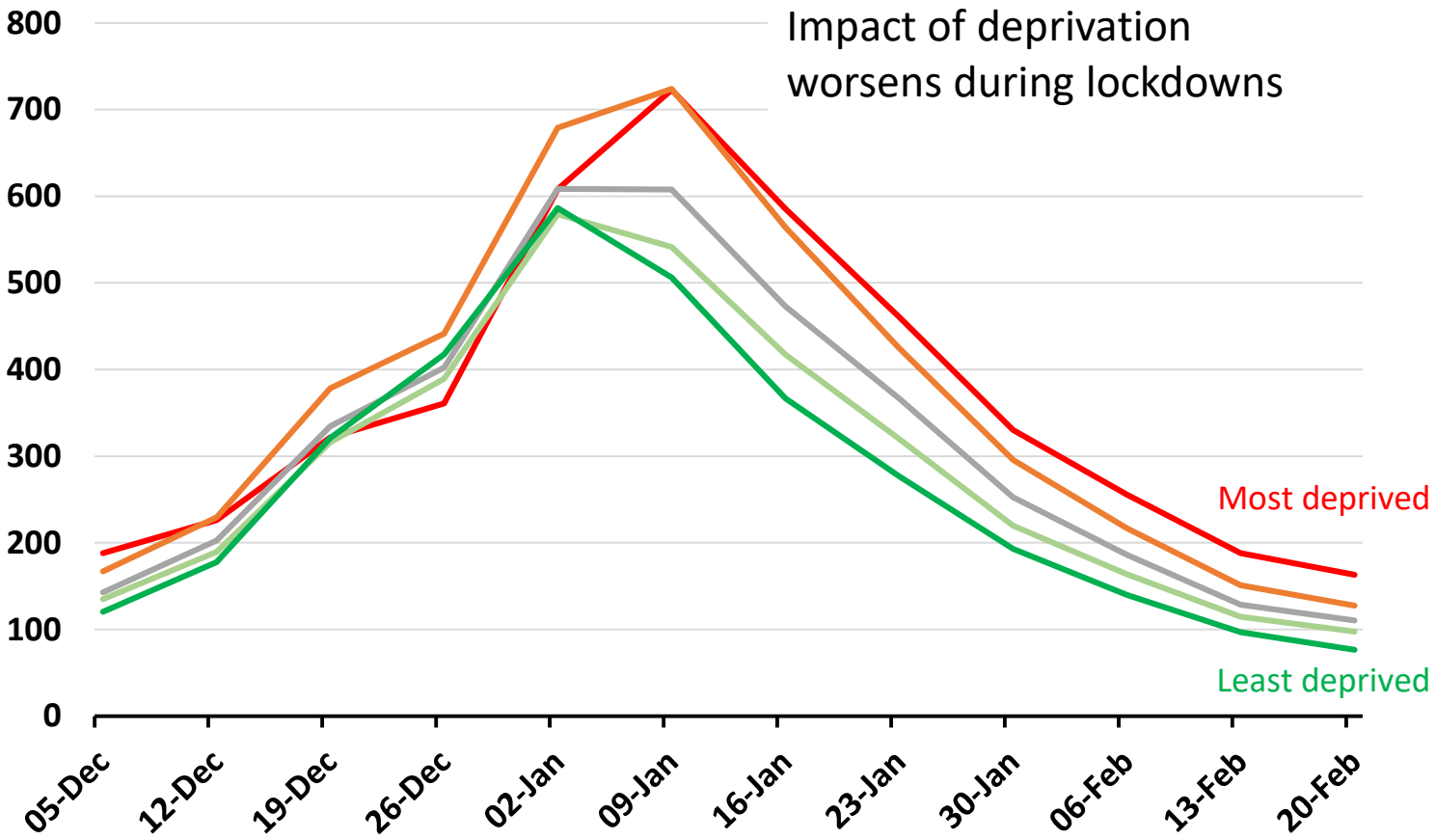
Average case rates per 100,000 people per week by deprivation (calculated at MSOA level)



Source: 2014 Households in Poverty Estimates and Deprivation Data provided by Tom Forth (@ThomasForth)
Data from https://coronavirus.data.gov.uk/details/download
Visualisation courtesy of Bob Hawkins

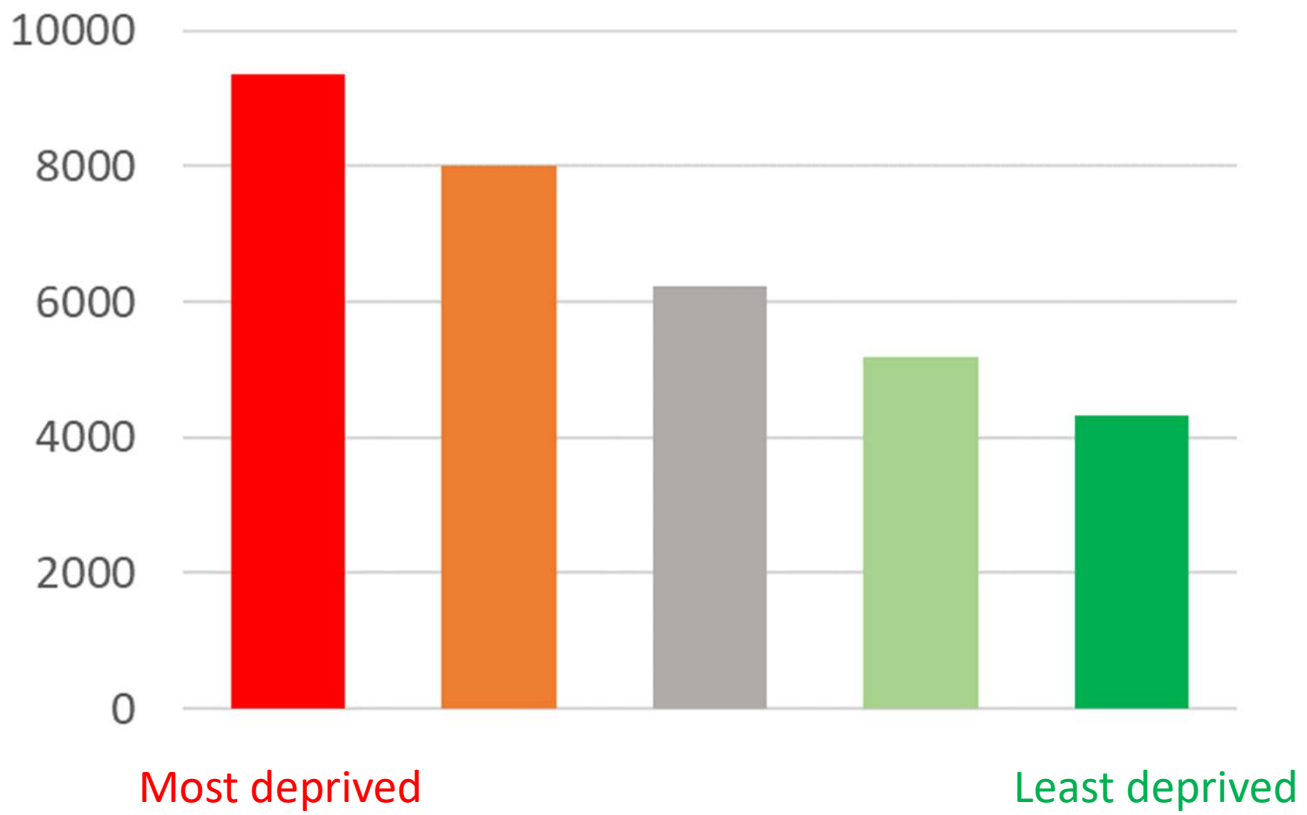
indie_SAGE
The Independent SAGE • Following the science

Average case rates per 100,000 people per week by deprivation (calculated at MSOA level)



Source: 2014 Households in Poverty Estimates and Deprivation Data provided by Tom Forth (@ThomasForth)
Data from https://coronavirus.data.gov.uk/details/download
Visualisation courtesy of Bob Hawkins

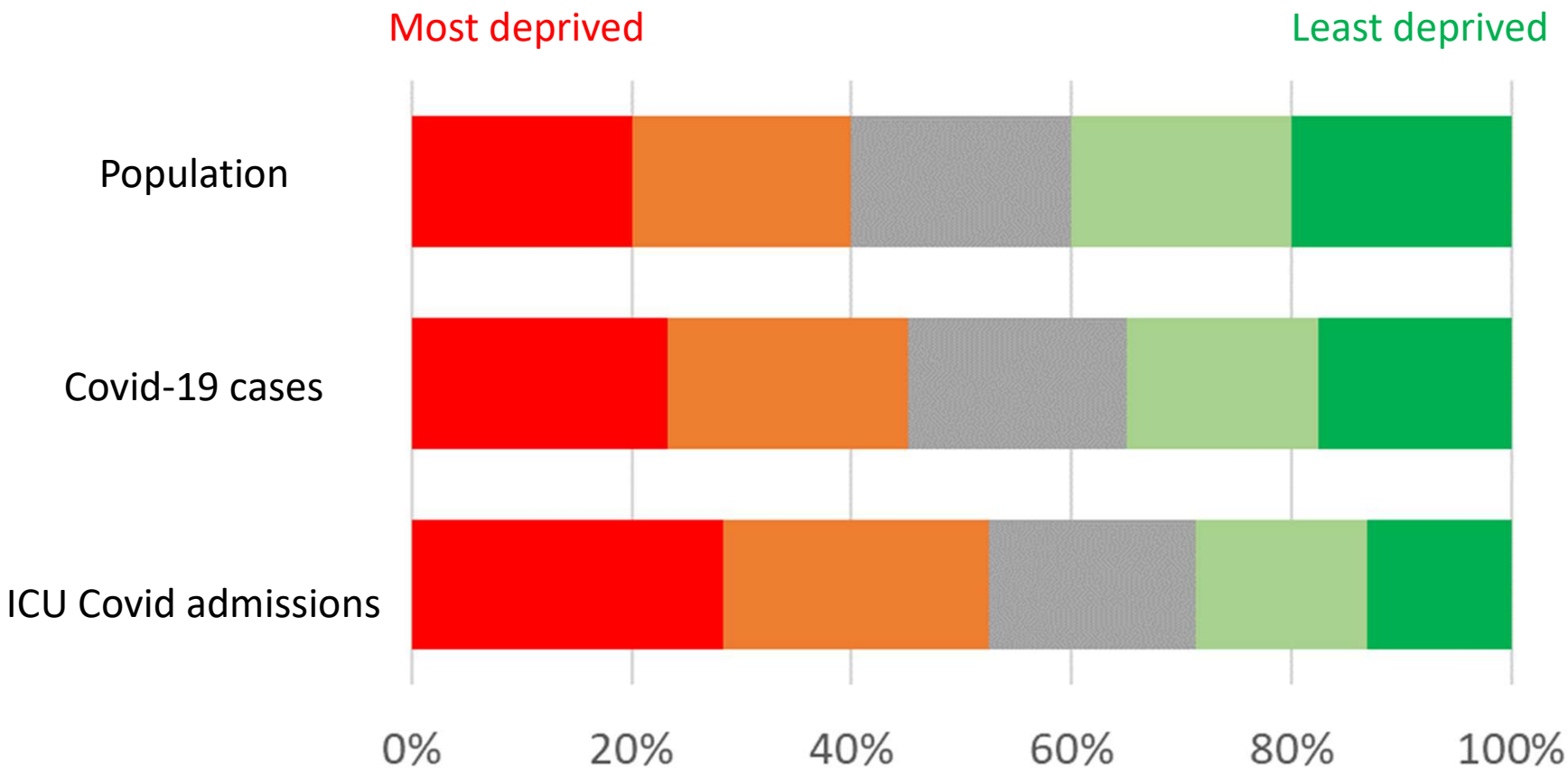
Total Covid admissions to ICU from March 2020 to 19th February 2021 by deprivation



ICU data from https://www.icnarc.org/Our-Audit/Audits/Cmp/Reports

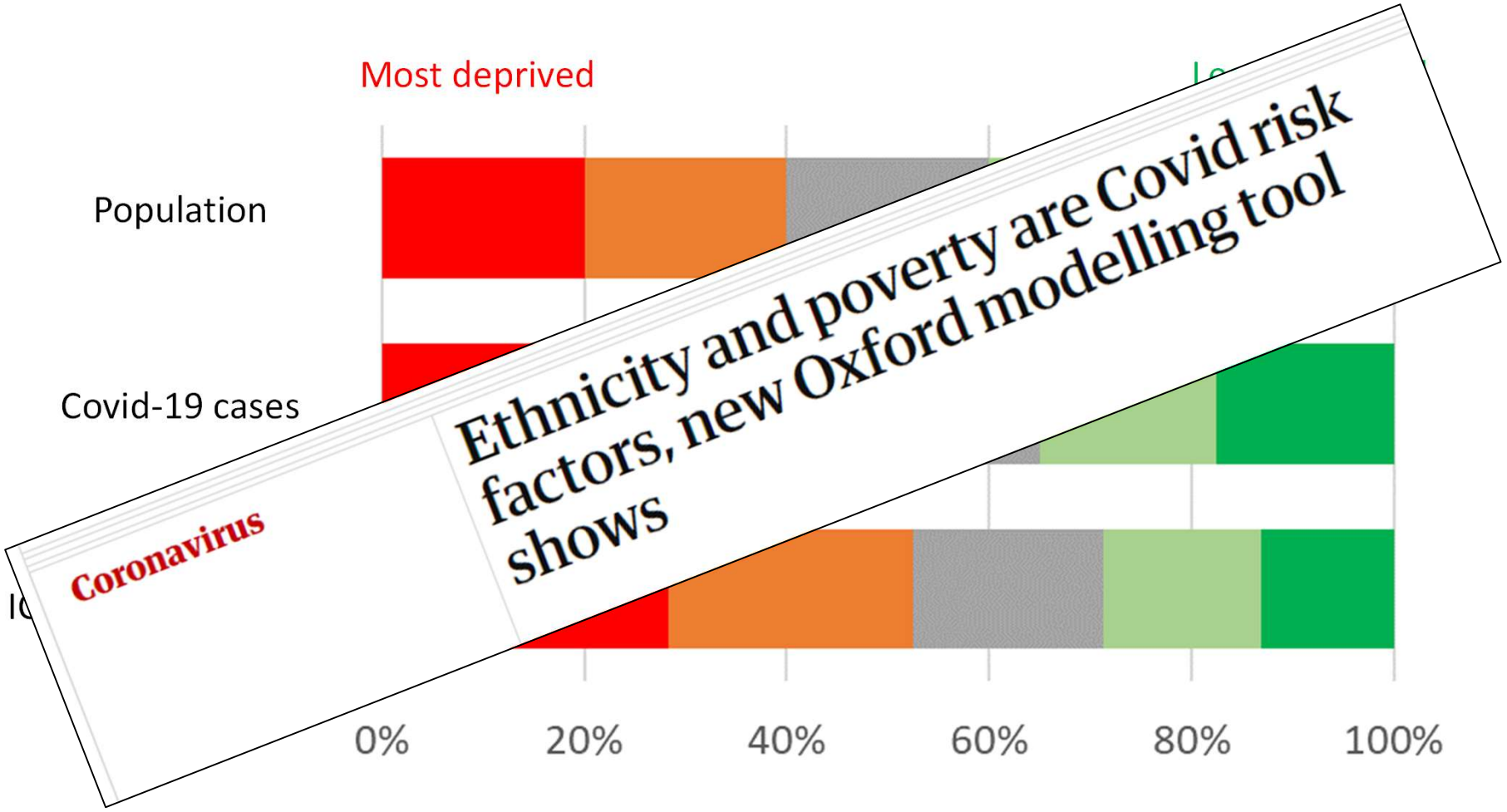
indie_SAGE
The Independent SAGE • Following the science

Cases and severe disease by deprivation



Source: 2014 Households in Poverty Estimates and Deprivation Data provided by Tom Forth (@ThomasForth)
Case data from https://coronavirus.data.gov.uk/details/download
ICU data from https://www.icnarc.org/Our-Audit/Audits/Cmp/Reports

Cases and severe disease by deprivation



Source: 2014 Households in Poverty Estimates and Deprivation Data provided by Tom Forth (@ThomasForth)
Case data from https://coronavirus.data.gov.uk/details/download
ICU data from https://www.icnarc.org/Our-Audit/Audits/Cmp/Reports

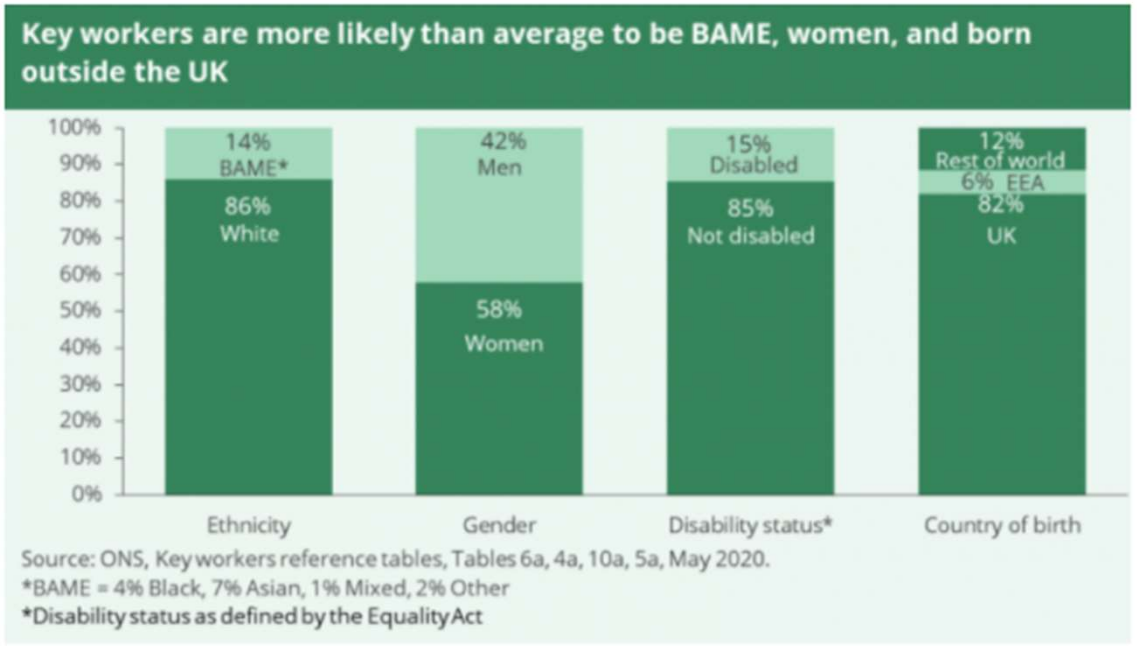
indie_SAGE
The Independent SAGE • Following the science

Some factors in the impact of deprivation

Key workers (inc taxi drivers, security guards, retail assistants) are more likely to get Covid.

They are also more likely to come from deprived and BME populations.

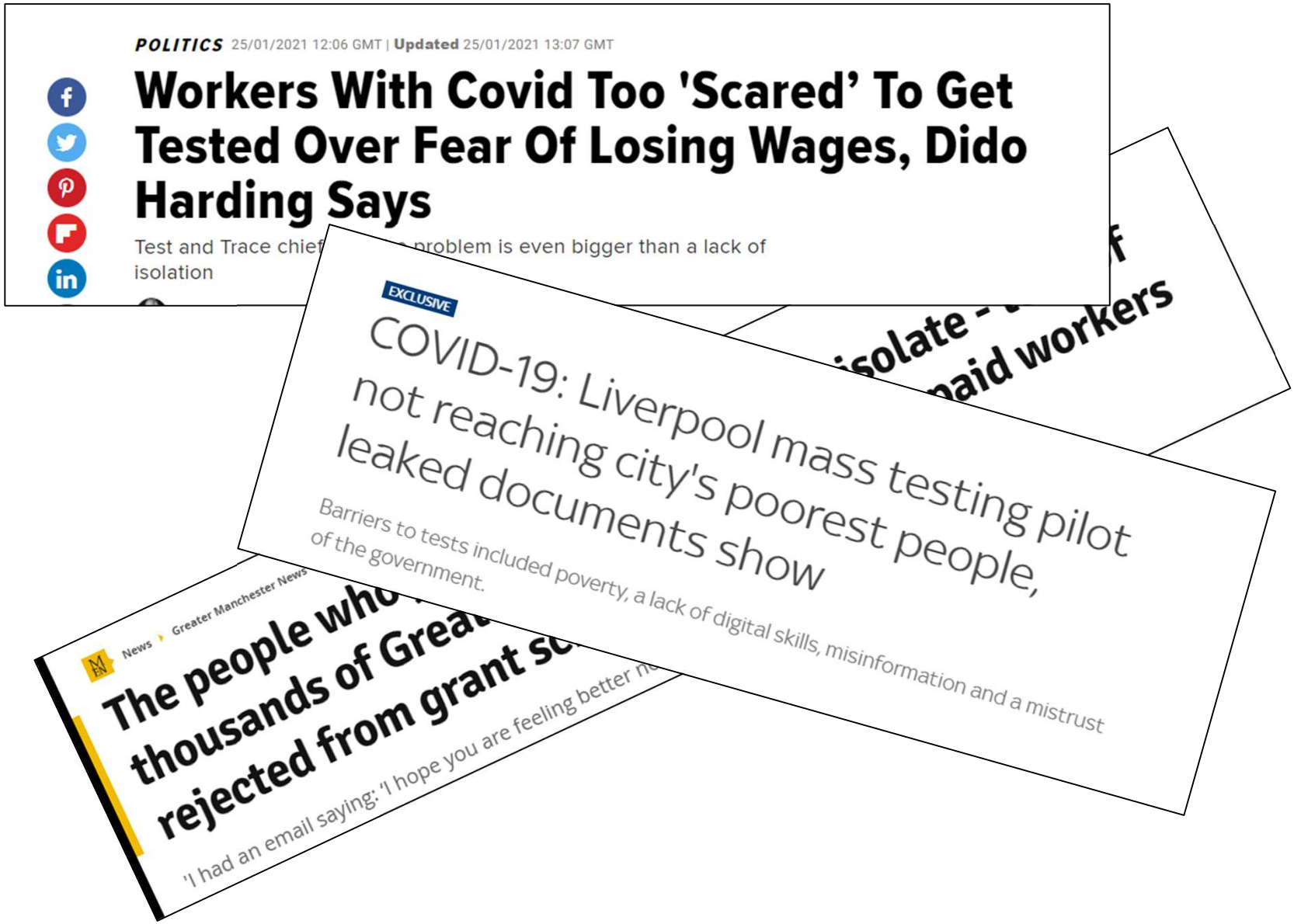
6. 15% of key workers were at moderate risk from COVID-19 because of a health condition



Source: ONS, Key workers, reference tables, tables 6a, 4a, 10a, 5a, May 2020

indie_SAGE
The Independent SAGE • Following the science

Some factors in the impact of deprivation

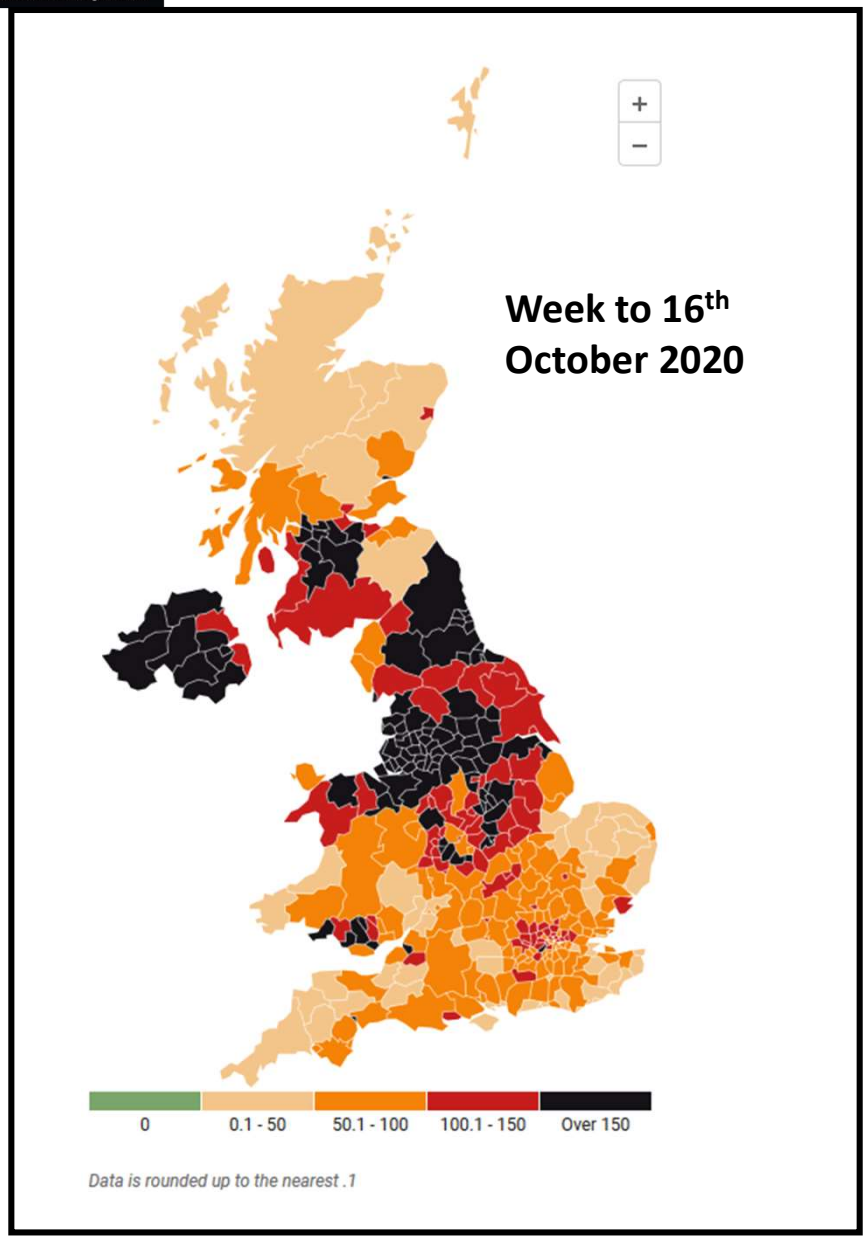


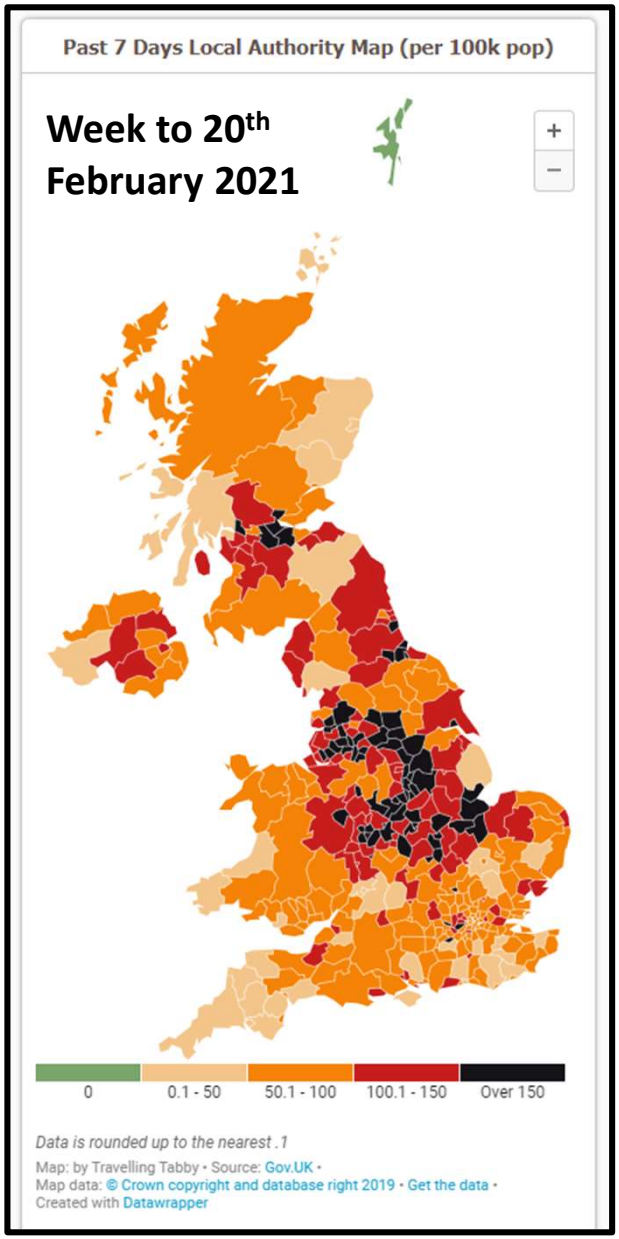
indie_SAGE
The Independent SAGE • Following the science

Some factors in the impact of deprivation

indie_SAGE
The Independent SAGE • Following the science

Map of where cases were and are

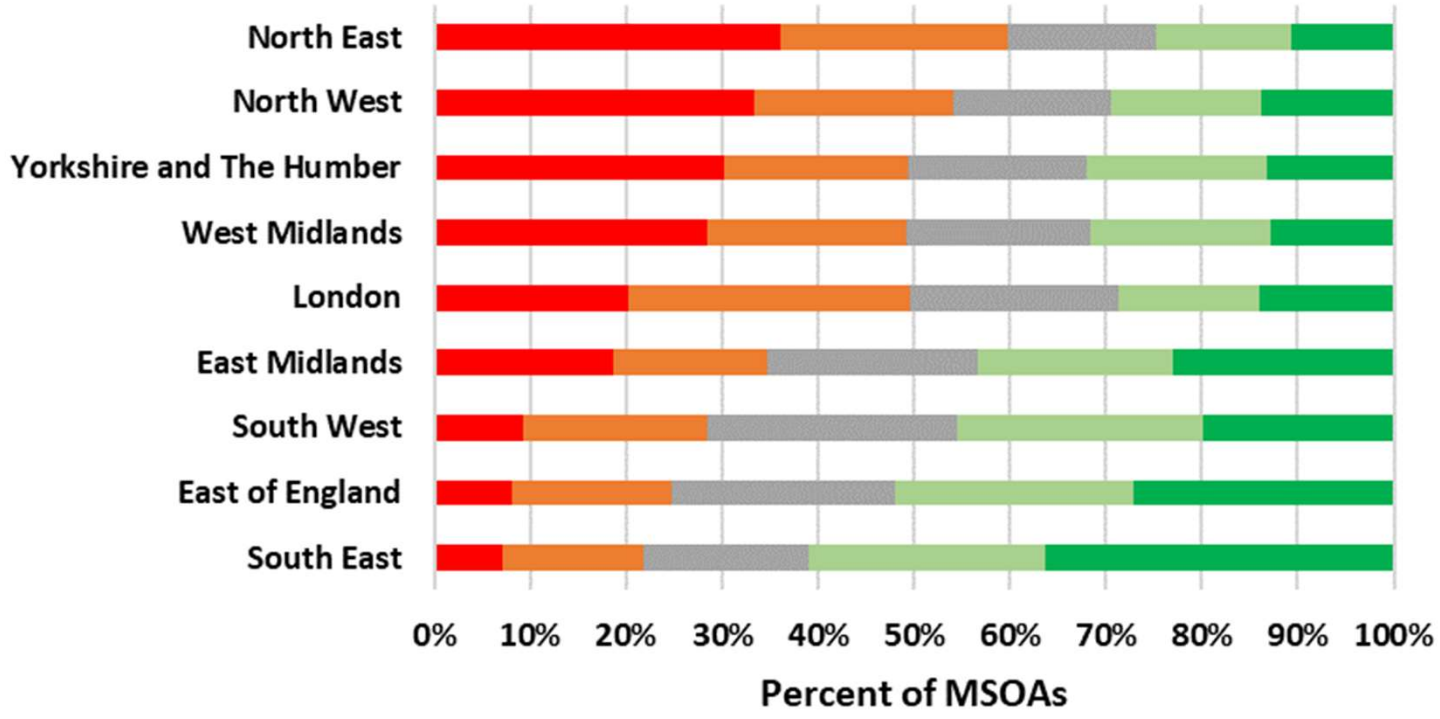




Graph from https://www.travellingtabby.com/uk-coronavirus-tracker/local

indie_SAGE
The Independent SAGE • Following the science

English regions ranked by deprivation



Source: 2014 Households in Poverty Estimates and Deprivation Data provided by Tom Forth (@ThomasForth)
Visualisation courtesy of Bob Hawkins

Local authorities with the highest persistent level of cases - England

Ranked by number of days between 1st September-19th February over 200 cases per 100,000 people per week (out of 172 days).

Threshold Set to 200 Cases per 100K for rolling 7 day sum			
Local Authority	**English Region**	**Days over Threshold**	**Percent of Days over Threshold**
Bury	North West	145	84%
Blackburn with Darwen	North West	142	83%
Preston	North West	141	82%
Burnley	North West	140	81%
Pendle	North West	139	81%
Leicester	East Midlands	135	78%
Rochdale	North West	134	78%
South Tyneside	North East	134	78%
Bolton	North West	132	77%
Hyndburn	North West	130	76%
Middlesbrough	North East	130	76%
Hartlepool	North East	129	75%
Birmingham	West Midlands	126	73%
Rossendale	North West	125	73%
Rotherham	Yorkshire and The Humber	124	72%
Oadby and Wigston	East Midlands	123	72%
Sandwell	West Midlands	123	72%
Stockton-on-Tees	North East	122	71%
East Staffordshire	West Midlands	120	70%
Wolverhampton	West Midlands	119	69%
Manchester	North West	118	69%
Nottingham	East Midlands	118	69%
Sunderland	North East	117	68%
Bassetlaw	East Midlands	116	67%
Bradford	Yorkshire and The Humber	115	67%
Salford	North West	115	67%
Walsall	West Midlands	115	67%
Slough	South East	114	66%
St. Helens	North West	114	66%
Oldham	North West	113	66%

Data:
https://api.coronavirus.data.gov.uk/v2/data?areaType=ltla&metric=newCasesBySpecimenDate&format=csv

Thank you to Bob Hawkins for the anlaysis

Local authorities with the highest persistent level of cases - England

Ranked by number of days between 1st September-19th February over 200 cases per 100,000 people per week (out of 172 days).

Highlighted rows currently in top 40 local authorities by case rate.

Data:
https://api.coronavirus.data.gov.uk/v2/data?areaType=ltla&metric=newCasesBySpecimenDate&format=csv

Thank you to Bob Hawkins for the anlaysis

Threshold Set to 200 Cases per 100K for rolling 7 day sum			
Local Authority	**English Region**	**Days over Threshold**	**Percent of Days over Threshold**
Bury	North West	145	84%
Blackburn with Darwen	North West	142	83%
Preston	North West	141	82%
Burnley	North West	140	81%
Pendle	North West	139	81%
Leicester	East Midlands	135	78%
Rochdale	North West	134	78%
South Tyneside	North East	134	78%
Bolton	North West	132	77%
Hyndburn	North West	130	76%
Middlesbrough	North East	130	76%
Hartlepool	North East	129	75%
Birmingham	West Midlands	126	73%
Rossendale	North West	125	73%
Rotherham	Yorkshire and The Humber	124	72%
Oadby and Wigston	East Midlands	123	72%
Sandwell	West Midlands	123	72%
Stockton-on-Tees	North East	122	71%
East Staffordshire	West Midlands	120	70%
Wolverhampton	West Midlands	119	69%
Manchester	North West	118	69%
Nottingham	East Midlands	118	69%
Sunderland	North East	117	68%
Bassetlaw	East Midlands	116	67%
Bradford	Yorkshire and The Humber	115	67%
Salford	North West	115	67%
Walsall	West Midlands	115	67%
Slough	South East	114	66%
St. Helens	North West	114	66%
Oldham	North West	113	66%

Local authorities with the highest persistent level of cases - Scotland

Ranked by number of days between 1st September-19th February over 200 cases per 100,000 people per week (out of 172 days).

Highlighted rows currently in top 15 local authorities by case rate.

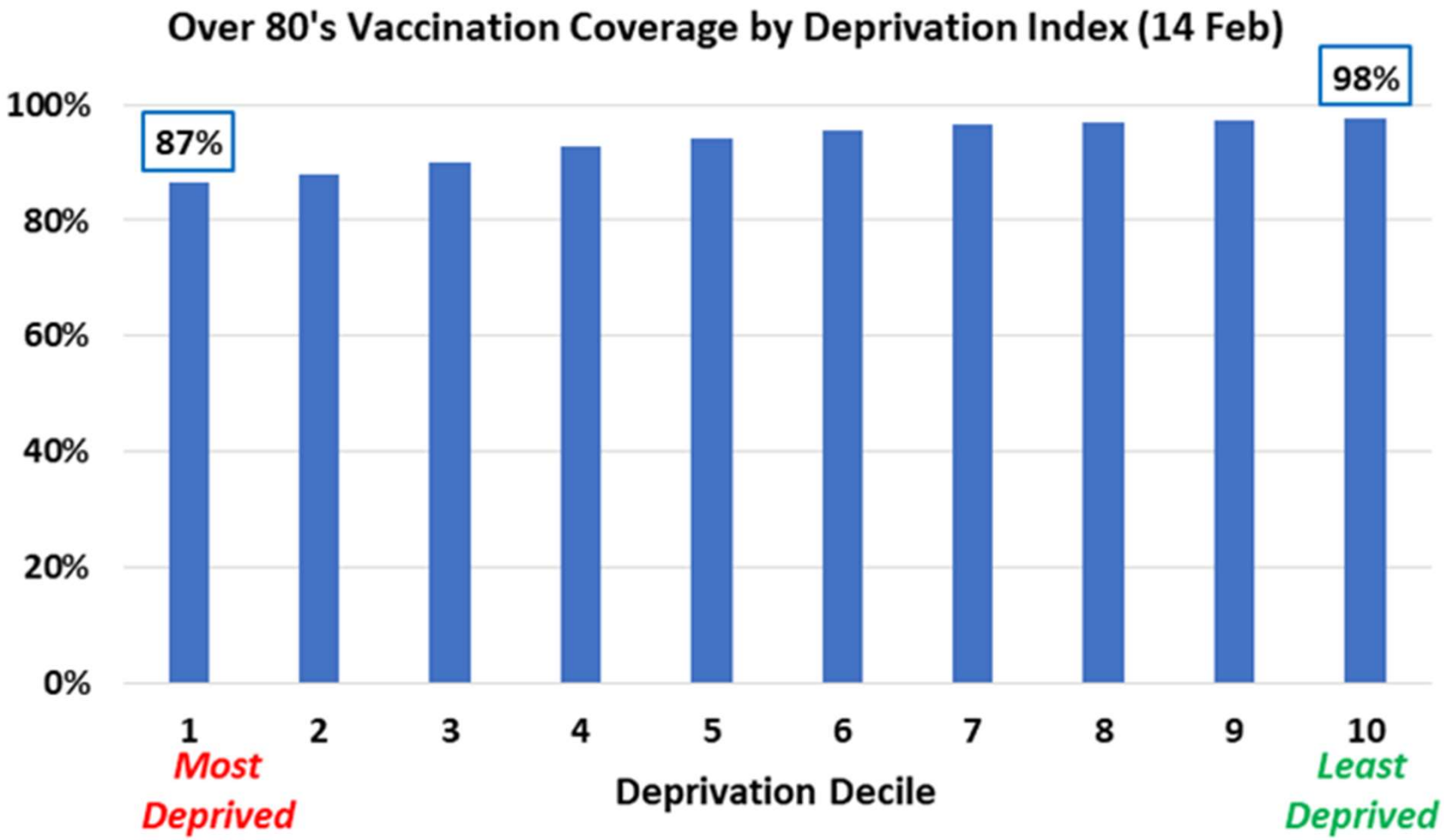
Threshold Set to 200 Cases per 100K for rolling 7 day sum			
Local Authority	**Nation / Region**	**Days over Threshold**	**Percent of Days over Threshold**
Glasgow City	Scotland	87	51%
Renfrewshire	Scotland	83	48%
North Lanarkshire	Scotland	83	48%
South Lanarkshire	Scotland	82	48%
East Ayrshire	Scotland	62	36%
East Dunbartonshire	Scotland	59	34%
West Dunbartonshire	Scotland	53	31%
Clackmannanshire	Scotland	43	25%
North Ayrshire	Scotland	41	24%
East Renfrewshire	Scotland	40	23%
Falkirk	Scotland	34	20%
Inverclyde	Scotland	28	16%
Dundee City	Scotland	25	15%
Dumfries and Galloway	Scotland	24	14%
Aberdeen City	Scotland	20	12%

Data:
https://api.coronavirus.data.gov.uk/v2/data?areaType=ltla&metric=newCasesBySpecimenDate&format=csv

Thank you to Bob Hawkins for the anlaysis

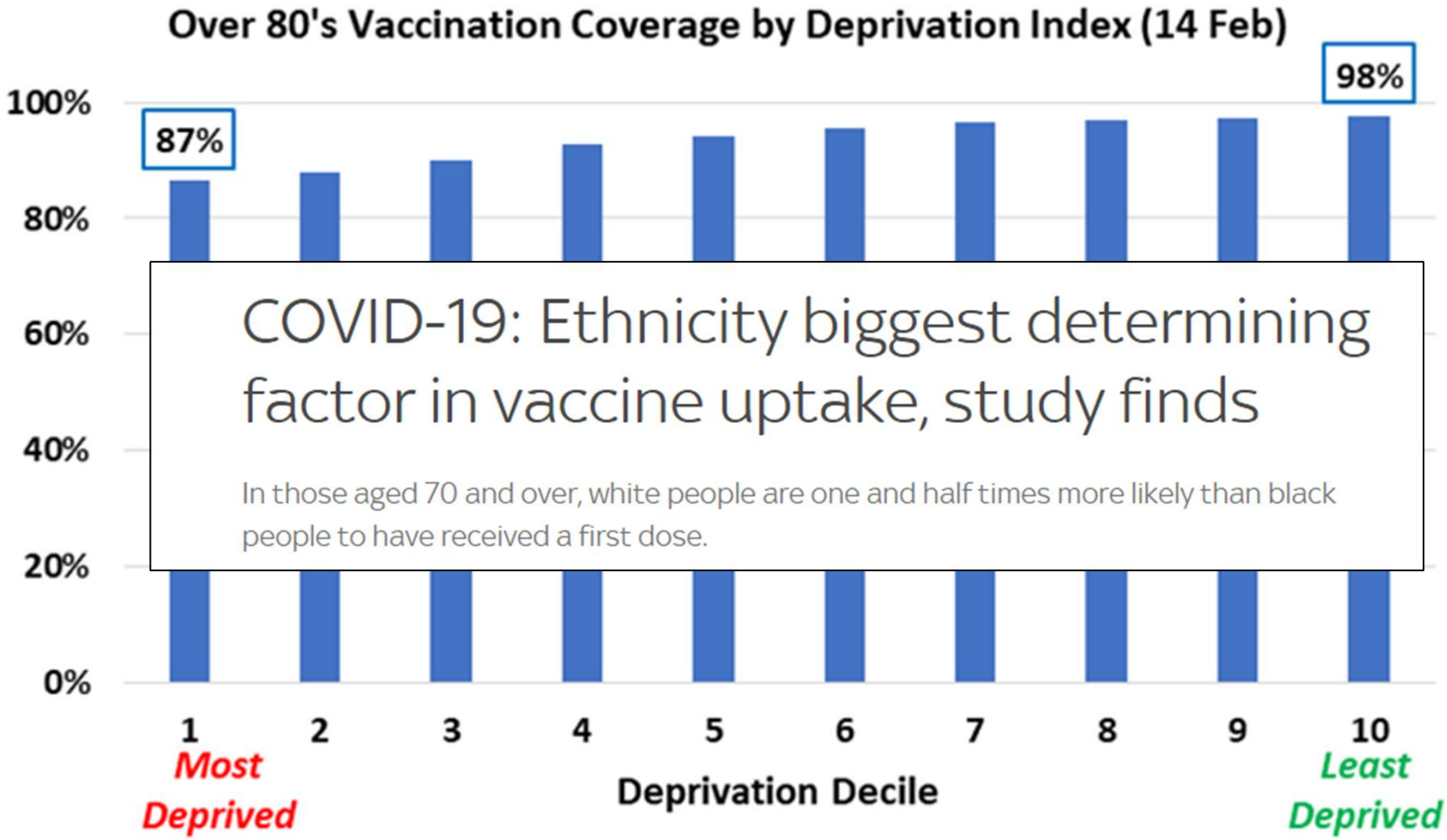
indie_SAGE
The Independent SAGE • Following the science

Vaccination by deprivation



indie_SAGE
The Independent SAGE • Following the science

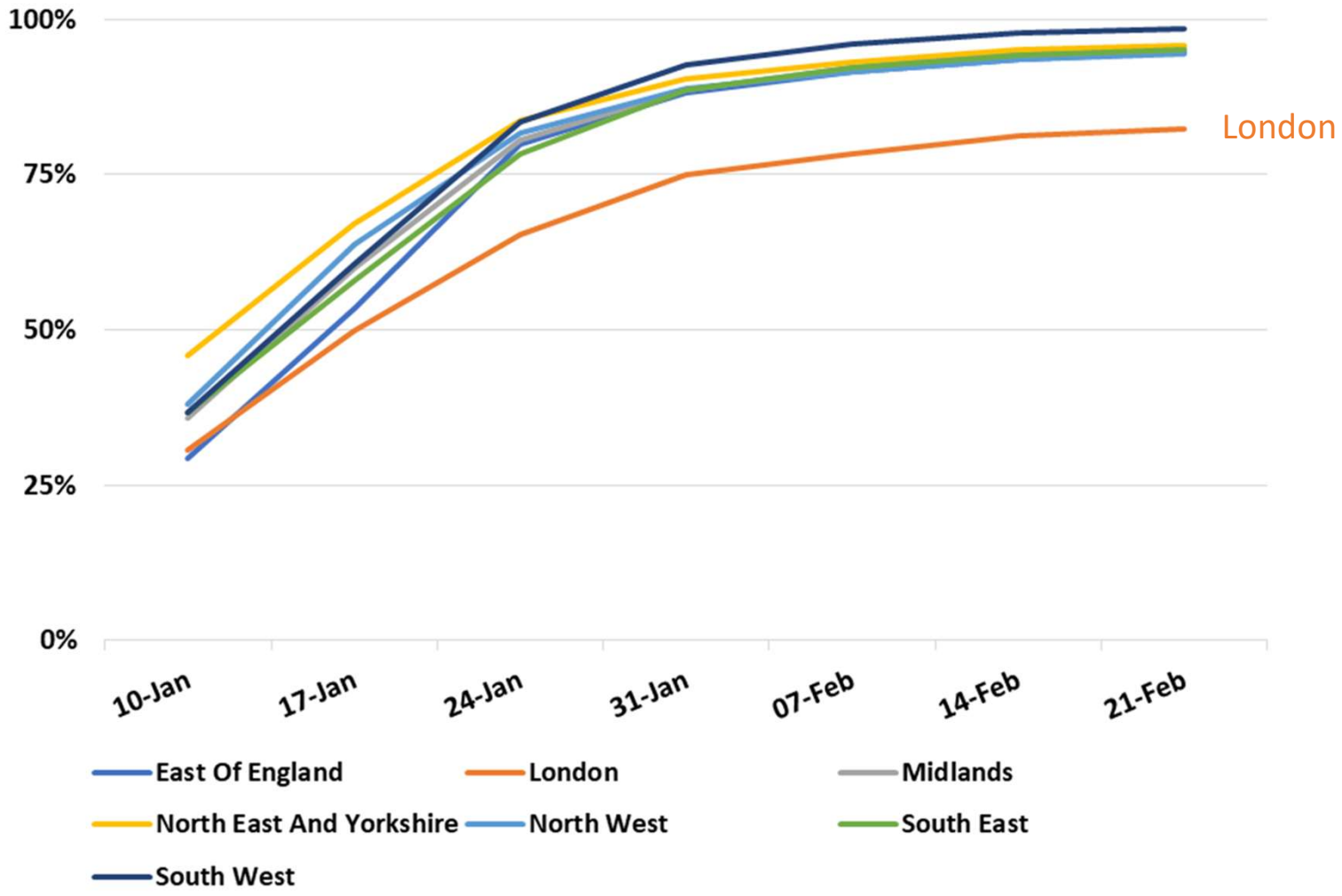
Vaccination by deprivation



indie_SAGE
The Independent SAGE • Following the science

First Dose Coverage for Over 80s by NHS Region to Feb 21

NOTE: percentages are based on population estimates which are **not** perfect



Data & population estimates from https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-vaccinations/

Thanks to Bob Hawkins for the chart

indie_SAGE
The Independent SAGE • Following the science

Summary

Hospitalisations and deaths continuing to fall in all nations. Cases also decreasing, but starting to plateau?

Vaccination going well and early data shows good efficacy.

The unfair impact of Covid-19 on more deprived populations must be addressed.

Quote from a Lancet editorial this week:

> *"Key to the success of this strategy is removal of structural inequalities that might lead to resurgences of the virus in certain marginalised populations"*