Latest numbers on COVID-19 in the UK – 12th February 2021

1. Cases
2. Hospitalisations
3. Deaths
4. Vaccinations
5. Things to think about coming out of lockdown

With many thanks to Bob Hawkins, Luke Shepherd and Catherine Finnecy for their help in collating the data and discussions on interpretation.
Cases
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
Positivity rates – UK nations – by date of test to 6th February

% of people tested who are positive

Data from:
Scotland: https://www.opendata.nhs.scot/dataset/covid-19-in-Scotland
England: https://coronavirus.data.gov.uk

Visualisation courtesy of Bob Hawkins
Positivity rates – UK nations – by date of test to 6th February

% of people tested who are positive

England
Percentage testing positive for COVID-19

Wales
Percentage testing positive for COVID-19

Northern Ireland
Percentage testing positive for COVID-19

Scotland
Percentage testing positive for COVID-19

ONS Infection survey

Data from:
Scotland: https://www.opendata.nhs.scot/dataset/covid-19-in-Scotland

Visualisation courtesy of Bob Hawkins
Positivity rate by region to 6th February

% of people tested who are positive

Data: https://api.coronavirus.data.gov.uk/v2/data?areaType=region&metric=newCasesBySpecimenDate&metric=uniqueCasePositivityBySpecimenDateRollingSum&format=csv
Positivity Rate for English Regions
Comparison of week ending Feb 6 to prior week to week ending Sep 1

% of people tested who are positive

Data: https://api.coronavirus.data.gov.uk/v2/data?areaType=region&metric=newCasesBySpecimenDate&metric=uniqueCasePositivityBySpecimenDateRollingSum&format=csv
Thank you to Bob Hawkins for the chart
Cases per 100,000 people per week at local authority level in England
Comparison of week ending Feb 6 to prior week to week ending Sep 1

Weekly cases per 100,000 people

Data: https://api.coronavirus.data.gov.uk/v2/data?areaType=ltla&metric=newCasesBySpecimenDate&format=csv
Thank you to Bob Hawkins for the chart
Hospitalisations
Number of people in hospital per million people – UK nations

Coming down quickly but every nation still higher than their first wave peak

Data from https://coronavirus.data.gov.uk.
Number of new hospital admissions with COVID-19 per day in England to 26th Jan

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

Falling steadily in all regions

Lockdown

Lockdown
Number of Adult Critical Care Bed Occupied Week on Week Comparison: England Regions


Thank you to Bob Hawkins for preparing the chart
Deaths
Number of new UK deaths from COVID-19 registered per week, to 15\textsuperscript{th} January

In the week to 29\textsuperscript{th} January, 45\% of deaths in England and Wales involved Covid-19.

Data from:
England and Wales: www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsregisteredweeklyinenglandandwalesprovisional/latest
Northern Ireland: www.nisra.gov.uk/publications/weekly-deaths
Number of deaths within 28 days of +ve COVID test reported per day across the UK to 11\textsuperscript{th} Feb

Vaccinations and better treatments \textit{should} mean we never have to experience such high numbers of deaths again.

Data from [https://coronavirus.data.gov.uk/](https://coronavirus.data.gov.uk/)
Vaccination data
Proportion of people vaccinated over time for each nation to 10\textsuperscript{th} February

Just over 3 million people received their first dose in the week to 10\textsuperscript{th} Feb

Data from https://coronavirus.data.gov.uk/
Thanks to Bob Hawkins for the chart
Population coverage by age to 10\textsuperscript{th} February

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

Thanks to Bob Hawkins for the chart
Impact from vaccination takes time to filter through...

Two weeks for protection after first dose to kick in.

Then two weeks before you that might results in reductions in hospital admissions.

Three weeks before you might see fewer deaths.

In England, we’d vaccinated about a quarter of over 80s by 3rd Jan 2021.
Weekly hospitalisations for Covid-19 by age group to 7th Feb (Public Health England)

Death within 28 days of a positive test by age group (England)

- 85+: fitted weekly decrease 41% (35% to 47%)
- 74–84: fitted weekly decrease 37% (30% to 43%)
- 65–74: fitted weekly decrease 34% (21% to 45%)
- 0 – 64: fitted weekly decrease 22% (10% to 33%)

Quasi–Poisson regression on last 10 days, 95% intervals; log–scale means that X% weekly decrease is a straight line.

Graph from Prof Spiegelhalter  https://twitter.com/d_spiegel/status/1359941056842891267?s=20
Data from  https://coronavirus.data.gov.uk/
Outbreaks within care homes: England (to week ending 7\textsuperscript{th} Feb)
Experience in Israel. Over 90% of over 60’s now vaccinated.

80% of over 60s received first dose within 3 weeks of programme start.

Israel vaccinated to a 3-week dose schedule.
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Israel vaccinated to a 3-week dose schedule.

Hopefully we will start seeing such clear impact on deaths & hospitalisations in the UK by the end of the month.

BUT remember that 90% of cases are in the under 70s.

Graph from Rossman et al. 2021. https://www.medrxiv.org/content/10.1101/2021.02.08.21251325v1
Relevant data for easing restrictions
We are out and about more than lockdown 1 but less than lockdown 3
Much of that is going to work

Graph from https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronavirustheukeconomyandsocietyfasterindicators/11february2021
There have been a steady number of outbreaks in nurseries, primary schools and special educational needs (SEN) schools. Data to week ending 7th February (England)

During lockdown, more deprived communities (Q1) at higher risk of catching Covid – more exposed
Data to week ending 7th February (England)

International picture: cases 1\textsuperscript{st} October – 10\textsuperscript{th} February

- About 20% of cases are B117
  Schools / hospitality shut, lockdown.

- About 15% of cases are B117
  Schools open (w masks)
  Hospitality closed.

- About 50% of cases are B117
  Schools / hospitality shut, curfew.
  Hospitality closed.
  Mid Jan: R=0.85 for original variant, R=1.27 for B117

- B117 varies by region (5-40%).
  Regional travel restrictions
  Curfews & no household mixing
  Schools & hospitality vary by region.

Data from [https://ourworldindata.org/](https://ourworldindata.org/) . Graph by & thanks to Luke Shepherd
International picture: cases 1st October – 10th February

Data from https://ourworldindata.org/. Graph by & thanks to Luke Shepherd

About 90% of cases are B117
Schools / hospitality shut, lockdown.

At least 75% of cases are B117
Hospitality closed. Lockdown
Schools to phase reopen from 22 Feb

B117 becoming dominant
Schools / hospitality shut, lockdown since mid Jan.

B117 dominant.
Hospitality shut
Schools about to phase open
Lockdown
Cases, hospitalisations and deaths now falling in all nations.

Vaccination going well – next few weeks should see clearer impact. BUT government must have detailed data of efficacy. Will they publish it?

Relaxing restrictions will be tricky – next week we will discuss this in more detail.

Variants are the global concern.