Latest numbers on COVID-19 in the UK – 22 October 2021

1. Vaccinations
2. Overall picture
3. Regional & age situation: cases
4. Regional & age situation: hospital

With many thanks to Bob Hawkins for his help in collating the data
Vaccination data
Percent of Total Population Unvaccinated (no dose given), Partially Vaccinated (1 dose) and Fully Vaccinated (2 doses) as at Oct 19
(Source: Covid Daily Update and Mid-2020 ONS Population Estimates)

Date: 19-Oct-21
Thanks to Bob Hawkins for the chart
First dose vaccine coverage by Age for England to 19 October 2021 (uses ONS 2020 population estimates)

Data from https://coronavirus.data.gov.uk/
Thanks to Bob Hawkins for the chart
Mid-2020 ONS Population Estimates
Vaccines do work very well in young people

Weekly incidence of COVID-19 cases per 100,000 population from Week 24 2021, in secondary age cohorts (Year 7 to 11) and sixth form age cohorts (Year 12 to Year 13) with dose 1 vaccine uptake in 12 to 15 year olds and in 16 to 17 year olds.

Incredibly high rates in 11-15 yr olds

Much lower rates in 16-18 yr olds

Boosters really work: trial published in New England Journal of Medicine this week on Pfizer 3rd dose

95.6% relative risk reduction in symptomatic infection for 3 vs 2 doses

Graph from https://www.nejm.org/doi/full/10.1056/NEJMc2113468
Over 50s vaccination coverage in England by age up to 20 Oct 2021
(uses ONS 2020 population estimates)

Data from https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-vaccinations/
Chart courtesy of Bob Hawkins
Over 50s vaccination coverage in England by age up to 20 Oct 2021 (uses ONS 2020 population estimates)

BUT it’s not over 70s who are driving transmission.

So boosting over the next few months *will* prevent admissions and deaths, but not necessarily impact much on transmission.
The gap between eligible and received is *widening*, not shrinking


Chart courtesy of Bob Hawkins
Over 50s vaccination coverage in NI by age up to 20 Oct 2021
(uses ONS 2020 population estimates)

Chart courtesy of Bob Hawkins
Overall picture
Number of new UK confirmed COVID-19 cases by reported date (people who have had a positive test) to 21 October 2021

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

Last time we were below 20,000 was 27 June, almost 4 months ago.

Today we will go over 4 million cases since 27 June.
Cases per 100,000 people per rolling week by home nation by date of test to 16 October

Consistent with positivity rates (except for Scotland which has been increasing)

Data from https://coronavirus.data.gov.uk
Number of people in hospital per million people – UK nations
7 day rolling average to 21 October

Data from https://coronavirus.data.gov.uk.
Number of deaths within 28 days of +ve COVID test reported per day across the UK to 21 October

We have recorded over 11,000 deaths since 27 June.

86% of ONS registered deaths with Covid are because of Covid. Very similar to January wave (85%-90%)

Data from [https://coronavirus.data.gov.uk/](https://coronavirus.data.gov.uk/)
Regional and age situation: cases (ENGLAND)
Weekly number of new confirmed COVID-19 cases / 100,000 people – England regions by date of test to 16 Oct 2021

Data from https://coronavirus.data.gov.uk
Weekly number of new confirmed COVID-19 cases / 100,000 people – England regions by date of test to 16 Oct 2021

Weekly number of new confirmed COVID-19 cases / 100,000 people – England regions by date of test to 16 Oct 2021

Story broke on 15th Oct
These increases are *not* because people have rushed to get tested

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

~43,000 false negative PCR tests (8 Sept - 12 Oct)
Daily Test Positivity Rate – England regions (by date of test to 14 Oct 2021)

~43,000 false negative PCR tests (8 Sept - 12 Oct)

Data from https://coronavirus.data.gov.uk
Positivity Rate for English regions
Comparison of week ending Oct 14 to prior week

Regions ranked by case positivity

Chart by Bob Hawkins
Positivity Rate for English local authorities in SW
Comparison of week ending Oct 14 to prior week

You see exactly the same pattern for case rates as well
Cases per 100,000 people per week for different age groups in England

Delta dominant, masks removed

Summer school holidays

10-14 yr olds

15-19 yr olds

5-9 yr olds

Data from https://coronavirus.data.gov.uk/
Cases per 100,000 people per week for different age groups in England

Delta dominant, masks removed

Summer school holidays

We should see rates in school children fall over half term – that plus teen vaccination might put a bit of a break on increases

Consistent with ONS infection survey week to 16 Oct
8% of School years 7-11 infected
4% of age 2 to school year 6 infected
Both around 2x higher than Dec/Jan peak.

Data from https://coronavirus.data.gov.uk/
Changes over time and age in modelled prevalence from the ONS infection survey

Big increases in school age kids since start of September

Rippling through to their parents... about a quarter of whom are not fully vaccinated and the rest are about 4 months out from their 2nd jab

And grandparents... with waning immunity

Chart by Paul Mainwood: https://twitter.com/PaulMainwood/status/1451509312724115456?s=20
## Number of new England confirmed COVID-19 cases per 100,000 people per week by age group

**ENGLAND**

<table>
<thead>
<tr>
<th>Age range</th>
<th>04-Sep</th>
<th>11-Sep</th>
<th>18-Sep</th>
<th>25-Sep</th>
<th>02-Oct</th>
<th>09-Oct</th>
<th>16-Oct</th>
<th>Age range</th>
<th>% increase week to 16 Oct</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 4</td>
<td>142</td>
<td>143</td>
<td>127</td>
<td>130</td>
<td>119</td>
<td>139</td>
<td>163</td>
<td>0 to 4</td>
<td>17%</td>
</tr>
<tr>
<td>5 to 9</td>
<td>328</td>
<td>392</td>
<td>472</td>
<td>563</td>
<td>487</td>
<td>573</td>
<td>710</td>
<td>5 to 9</td>
<td>24%</td>
</tr>
<tr>
<td>10 to 14</td>
<td>554</td>
<td>648</td>
<td>906</td>
<td>1501</td>
<td>1461</td>
<td>1517</td>
<td>1841</td>
<td>10 to 14</td>
<td>21%</td>
</tr>
<tr>
<td>15 to 19</td>
<td>802</td>
<td>557</td>
<td>470</td>
<td>626</td>
<td>635</td>
<td>677</td>
<td>819</td>
<td>15 to 19</td>
<td>21%</td>
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<td>377</td>
<td>291</td>
<td>187</td>
<td>166</td>
<td>164</td>
<td>181</td>
<td>216</td>
<td>20 to 29</td>
<td>19%</td>
</tr>
<tr>
<td>30 to 39</td>
<td>361</td>
<td>311</td>
<td>239</td>
<td>267</td>
<td>268</td>
<td>309</td>
<td>356</td>
<td>30 to 39</td>
<td>15%</td>
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<td>40 to 59</td>
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<td>336</td>
<td>288</td>
<td>384</td>
<td>404</td>
<td>464</td>
<td>555</td>
<td>40 to 59</td>
<td>19%</td>
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<td>50 to 59</td>
<td>291</td>
<td>259</td>
<td>197</td>
<td>226</td>
<td>246</td>
<td>295</td>
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<td>50 to 59</td>
<td>23%</td>
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<tr>
<td>60 plus</td>
<td>167</td>
<td>156</td>
<td>115</td>
<td>120</td>
<td>124</td>
<td>161</td>
<td>202</td>
<td>60 plus</td>
<td>25%</td>
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**SOUTH WEST**

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<tr>
<th>Age range</th>
<th>04-Sep</th>
<th>11-Sep</th>
<th>18-Sep</th>
<th>25-Sep</th>
<th>02-Oct</th>
<th>09-Oct</th>
<th>16-Oct</th>
<th>Age range</th>
<th>% increase week to 16 Oct</th>
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<tr>
<td>0 to 4</td>
<td>189</td>
<td>136</td>
<td>121</td>
<td>134</td>
<td>114</td>
<td>129</td>
<td>221</td>
<td>0 to 4</td>
<td>70%</td>
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<td>5 to 9</td>
<td>371</td>
<td>330</td>
<td>365</td>
<td>512</td>
<td>426</td>
<td>465</td>
<td>1050</td>
<td>5 to 9</td>
<td>126%</td>
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<td>10 to 14</td>
<td>676</td>
<td>566</td>
<td>795</td>
<td>1398</td>
<td>1486</td>
<td>1429</td>
<td>3113</td>
<td>10 to 14</td>
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<td>15 to 19</td>
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<td>525</td>
<td>398</td>
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<td>606</td>
<td>611</td>
<td>1232</td>
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<tr>
<td>20 to 29</td>
<td>470</td>
<td>285</td>
<td>165</td>
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<td>131</td>
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<td>83%</td>
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<td>481</td>
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<tr>
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<td>118</td>
<td>86</td>
<td>96</td>
<td>95</td>
<td>119</td>
<td>216</td>
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<td>81%</td>
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**LONDON**

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<th>18-Sep</th>
<th>25-Sep</th>
<th>02-Oct</th>
<th>09-Oct</th>
<th>16-Oct</th>
<th>Age range</th>
<th>% increase week to 16 Oct</th>
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<td>78</td>
<td>67</td>
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<tr>
<td>5 to 9</td>
<td>198</td>
<td>247</td>
<td>251</td>
<td>286</td>
<td>249</td>
<td>267</td>
<td>317</td>
<td>5 to 9</td>
<td>19%</td>
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<tr>
<td>10 to 14</td>
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<td>494</td>
<td>739</td>
<td>705</td>
<td>707</td>
<td>836</td>
<td>10 to 14</td>
<td>18%</td>
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<tr>
<td>15 to 19</td>
<td>554</td>
<td>404</td>
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<td>389</td>
<td>401</td>
<td>412</td>
<td>471</td>
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Data from [https://coronavirus.data.gov.uk](https://coronavirus.data.gov.uk)
Regional and age situation: hospital (ENGLAND)
Number of hospital admissions with Covid every day in England

There have been over 75,000 admissions since 27 June

Data from https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-hospital-activity/
There are 4,900 adult Covid patients in hospital – about 6% of all inpatients (2.4% in early April).

There are 842 adult Covid patients in Critical care beds – about 24% of all Critical care patients.

95% of all adult general and acute beds are currently occupied (84K/89K). This is incredibly high.
7-day average of daily number of new hospital admissions with COVID-19 per day / million people across different regions in England

7-day rolling average of hospital admissions in Under 18s in England to 19 Oct

Much much lower numbers than for adults

Data from https://coronavirus.data.gov.uk
7-day rolling average of hospital admissions in 18-64 year olds in England to 19 Oct

Data from https://coronavirus.data.gov.uk.
7-day rolling average of hospital admissions in over 65s in England to 19 Oct

Data from https://coronavirus.data.gov.uk.
Immensa Health Clinic (Dante Laboratories) testing failure: Independent SAGE statement
Urgent action required:

1. Rapid publication of the report of the UKHSA review process, including speed of response & quality assurance process

2. Publication of the process and decision making for awarding the contract to Immensa Health Clinic.

3. Publication of the original contract with Immensa Health Clinic including oversight of quality and accreditation of the lab.

4. Details of the role of PHE/UKHSA in the awarding and monitoring of this and other outsourced laboratory contracts.

5. Details of the clinical, public health and governance response to the laboratory failure including the potential for retesting of original stored samples, and enhanced surveillance of those communities affected.

6. Details of measures to assure other labs are meeting the standards required.

7. Rapidly re-assemble PHE, NHS and aligned university laboratory capacities, and their clinical leaderships, to drive future laboratory support of COVID response. This should be associated with the migration of outsourced contracts back to such a consortium wherever possible.

Vaccine Plus plan
1. Endorse call for accelerating vaccination – both in uptake and accessibility
2. BUT need to support vaccinations with other public health protections that our Western European neighbours are using effectively
3. While we must all play our part, government must provide the support necessary for us to our bit:
   • Communication of symptoms
   • Accessibility of tests and communication about their importance
   • Accessibility of vaccines and communication about their importance
   • Sick pay and practical support for those who must self-isolate
   • Supporting businesses and other settings to provide covid-safe spaces, including support for improving and communicating ventilation standards
4. This is not a call for a “lockdown”. Not doing these things makes a future lockdown more likely – this is an anti-lockdown strategy!

17th September plan: