# COVID-19 update to the Healthy in Hackney meeting

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8 December 2021

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# Key messages

- In the latest week of available data, ending 1 December, 353 cases were recorded per 100,000 population in Hackney, 35% more than the previous week.
- London and England both recorded lower increases in incidence rates than Hackney in the latest week. Despite this, both geographies continue to record incidence rates higher than Hackney.
- School-aged populations recorded the highest incidence rates in the latest week of available data, 49% higher than the average for Hackney and the City of London.
- Testing and positivity rates have increased for LFD and PCR tests as a whole since the beginning of September 2021.
- As of 28 November 2021, Hackney and the City of London were recording the fifth lowest first dose COVID-19 vaccination rates in England and the lowest vaccination rates for 12- to 15-year-olds. This is despite higher invitation rates than the NEL average for all major cohorts.
- While overall acute bed occupancy has remained stable over the past month across NEL, critical care bed occupancy has increased to 92%.



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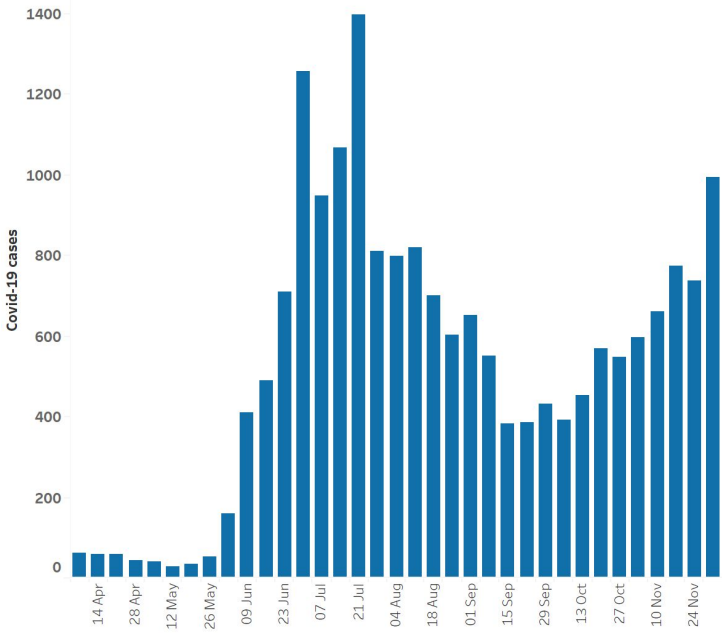
# COVID-19 incidence rates have been steadily increasing since mid September

**Covid-19 cases by week, Hackney, 7 April to 1 December 2021**




Data source: UK Health Security Agency (UKHSA) and population from NHS England National Immunisation Management Service (NIMS).

- Looking at COVID-19 cases in the third wave of the pandemic, incidence rates peaked in the week ending 20 July 2021 at 530 cases per 100,000 population.
- While incidence rates have remained lower than this peak ever since, a relatively consistent increase in COVID-19 has been recorded each week since mid September.
- In the latest week of available data, ending 1 December, 353 cases were recorded per 100,000 population in Hackney, 35% more than the previous week.
- London and England both recorded lower increases in incidence rates than Hackney in the latest week. Despite this, both geographies continue to record incidence rates higher than Hackney, at 405 and 461 cases per 100,000 population respectively.



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# School-aged populations continue to recorded the highest COVID-19 incidence rates

**Covid-19 cases by age group and week, Hackney and the City, 13 October to 1 December 2021.**

| Age group | 13 Oct 2021 | 20 Oct 2021 | 27 Oct 2021 | 03 Nov 2021 | 10 Nov 2021 | 17 Nov 2021 | 24 Nov 2021 | 01 Dec 2021 |
|---|---|---|---|---|---|---|---|---|
| 0 - 9 | 89 | 101 | 119 | 137 | 124 | 190 | 211 | 246 |
| 10-19 | 344 | 413 | 246 | 353 | 356 | 426 | 340 | 495 |
| 20-29 | 143 | 218 | 229 | 210 | 283 | 366 | 364 | 428 |
| 30-39 | 145 | 201 | 172 | 203 | 246 | 276 | 296 | 401 |
| 40-49 | 190 | 261 | 232 | 274 | 288 | 323 | 276 | 399 |
| 50-59 | 153 | 133 | 218 | 211 | 197 | 211 | 177 | 316 |
| 60-69 | 121 | 143 | 198 | 148 | 148 | 143 | 132 | 225 |
| 70-79 | 117 | 98 | 137 | 98 | 117 | 108 | 108 | 78 |
| 80+ | 67 | 50 | 116 | 133 | 50 | 17 | 67 | 67 |

COVID-19 cases per 100,000 population

17 495

Data source: UK Health Security Agency (UKHSA) and population from NHS England National Immunisation Management Service (NIMS).

- Since the return of schools this academic year, 10- to 19-year-olds have recorded the highest incidence rates each week except the week ending 24 November 2021.
- In the week ending 1 December, 10- to 19-year-olds recorded an incidence rate of 495 cases per 100,000 population, 49% higher than the average for Hackney and the City of London.
- Between 9 September and 1 December 2021, 1.5% of tests taken through school mass testing returned a positive result in comparison to 1.4% of all LFTs. However, while total positivity rates for LFTs have increased to an average of 1.8% in the past month, positivity rates for school mass testing have remained stable.
- Positivity rates have also increased for PCR tests as a whole. In the week ending 1 December, 6.8% of PCR test taken by residents of Hackney returned a positive result, up from 3.1% in the week ending 15 September 2021.



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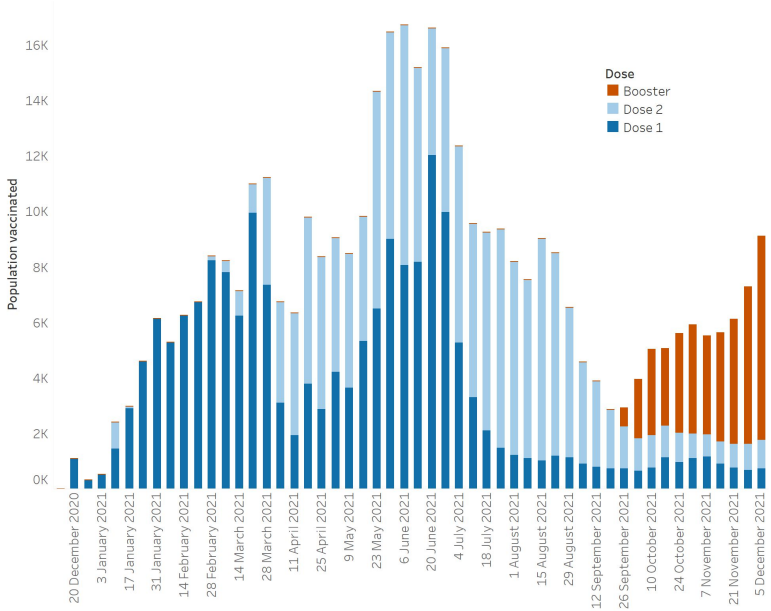
# Hackney and the City of London are recording the fifth lowest first dose COVID-19 vaccination rates in England

**Covid-19 vaccinations by dose number and ending week, Hackney and the City, 15 December 2020 to 5 December 2021**




Data source: UK Health Security Agency (UKHSA) and population from NHS England National Immunisation Management Service (NIMS).*Excluding data on third doses and booster vaccines.

- As of 5 December, 62% of Hackney's population aged 12+ had received a first dose of the COVID-19 vaccine, 90% of those who had received a first dose had also received a second, and 25% of those aged 18 and over who had received a second dose had also received a third or booster dose.
- While the number of booster vaccinations received by residents each week has increased relatively consistently since the end of September, with 7,377 doses administered in the week ending 1 December 2021, less than 1% (747) of completely unvaccinated populations received a first dose in the latest week.
- As of 28 November 2021, Hackney and the City of London were recording the fifth lowest first dose COVID-19 vaccination rates in England and the lowest vaccination rates for 12- to 15-year-olds.



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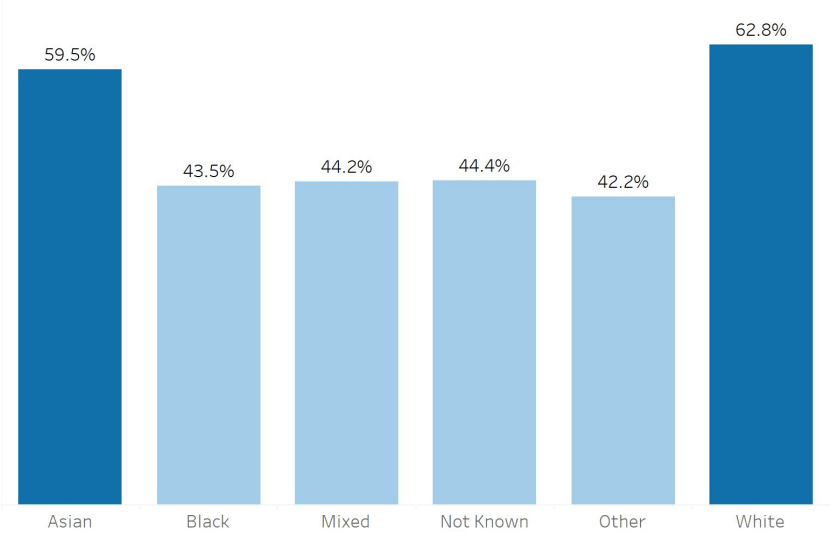
# Hackney and the City continue to record lower vaccination rates than the NEL average despite higher rates of invitation

**COVID-19 total first dose vaccination rates by ethnic group as of 5 December 2021, Hackney.***




Data source: UK Health Security Agency (UKHSA). *Populations aged 0+.
**When excluding Arab ethnicities who have a small population size in Hackney.
CEV = Clinically Extremely Vulnerable individuals.

- Vaccination rates in Hackney and the City of London are lower than the average for NEL across most older and at-risk groups: As of 2 December, first dose vaccination rates:
  - **CEV or aged 70 to 74**: 81% in Hackney and the City of London vs 87% in NEL
  - **COVID-19 at risk aged 16 to 64:** 72% vs 79%
  - **Older adult residents in care homes**: 92% vs 95%
- This is despite higher invitation rates in Hackney and the City of London than the NEL average for all major cohorts.
- As of 5 December 2021, White and Asian ethnicities had the highest vaccination rates** compared to all other groups.
- The proportion of population vaccinated with at least one dose varies by ward from 46% in Springfield to 70% in Clissold. Wards in the north of the borough continue to record the lowest vaccination rates.



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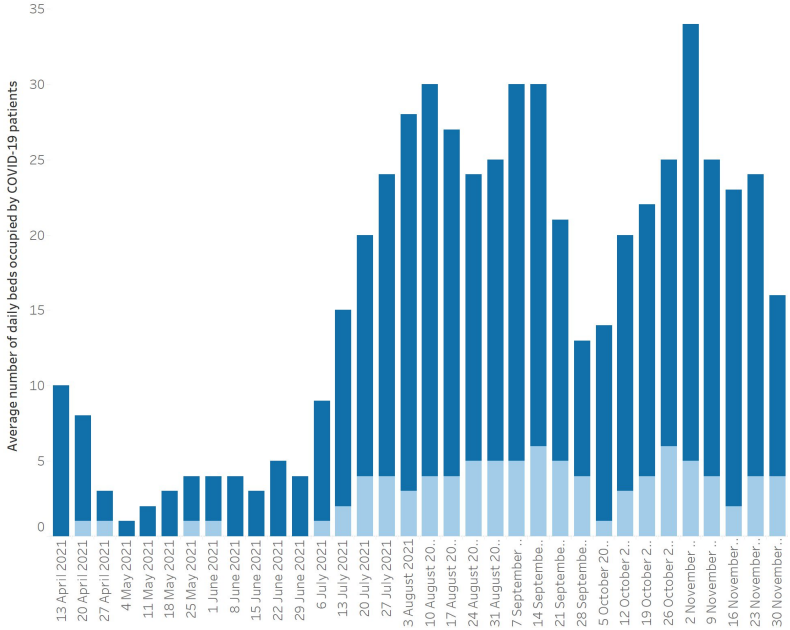
# Overall critical care bed occupancy in NEL has increased consistently each week since the end of October

**Average number of Homerton University Hospital beds occupied by Covid-19 patients each day by week, 13 Apr to 2 Nov 2021**




Data source: NHS Covid-19 Hospital Activity. NEL, Leading indicators dashboard; NHS, COVID-19 Hospital Activity; ONS, Death registrations and occurrences by local authority and health board

- Since the beginning of June 2021, there have been 58 deaths recorded among residents of Hackney that were due to or involving COVID-19, averaging at 2.3 deaths a week.
- In the week ending 19 November 2021, no deaths due to or involving COVID-19 were registered among residents of Hackney. Eight were registered in the previous week.
- While overall acute bed occupancy across NEL has remained stable over the past month, critical care bed occupancy has increased to 92%. As of 6 December, 16% of of critical care beds and 7% of general and acute (G&A) beds were occupied by COVID-19 patients across NEL, up 17% and 9% respectively from the previous week.
- In the week ending 30 November, an average of 16 beds were occupied by COVID-19 patients each day at Homerton University Hospital. This is 33.3% lower than the previous week.



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# Omicron (O) Variant

- On 26 November 2021, WHO designated Omicron, a new variant of COVID-19, as a variant of concern.
- Delta remains the predominant variant in England, accounting for approximately 99.8% of sequenced cases from 10 October to 30 November 2021
- Emerging evidence on the O variant indicates that it is likely to be more highly transmissible than Delta
- O may also be more likely to evade immunity that has been induced either by vaccination or previous natural infection
- Gene sequencing evidence also suggests that it is less likely to be amenable to treatment with therapeutic antibodies
- So far there is no evidence that this variant causes more severe disease

# Notification has been received of Omicron cases in Hackney in the latest week

- Currently rising numbers cases of O across the UK, not only travel-related, indicating community transmission
- The first case of Omicron was reported in the UK on 27 November 2021. As of 11 December 2021, 568 cases had been reported in the UK & 174 London. 11 of these are in Hackney.
- To increase population protection from transmission of O, last week mask mandate re-introduced, international travel restrictions in place for countries that currently have high numbers of cases, and reintroduction of day 2 PCR testing for all incoming, international travellers, even if vaccinated
- The numbers of people infected with the Omicron variant in the UK now appears to be doubling every two to three days.
- South African experience indicates that high numbers of infections are translating to high numbers of people admitted to hospital
- As a result, the introduction of more robust measures, 'Plan B', was announced on 8 December. This includes widening the rules on wearing face coverings, use of COVID-19 vaccine passports and a requirement to work from home, where possible.

# Omicron Variant Characteristics

**3 December 2021 Risk assessment for SARS-CoV-2 variant: Omicron VOC-21NOV-01 (B.1.1.529)** **UK Health Security Agency**

| Indicator | Red, amber or green status* | Confidence level | Assessment and rationale |
|---|---|---|---|
| **Transmissibility between humans** | Amber | **Low** | **At least as transmissible as currently circulating variants**<br>Omicron is transmitting rapidly and successfully. Increased transmissibility compared to Delta is biologically plausible with the presence of furin cleavage site and nucleocapsid changes associated in vitro with advantages for replication, as well as extensive changes to the RBD. Structural modelling suggests that the mutations present may increase human ACE2 binding affinity to a much greater extent than that seen for any other variant.<br>Phylogeny suggests a recent emergence. Data from South Africa suggests that Omicron has a pronounced growth advantage there. However, this may be due to transmissibility or immune escape related, or both. |
| **Infection severity** | | | **Insufficient data** |
| **Naturally acquired immunity** | Red | **Low** | **Mutations suggestive of reduced protection from natural immunity and limited supporting epidemiological evidence**<br>Based on experience with other variants, laboratory data on individual mutations, and structural modelling, the mutations present are very likely to reduce antibody binding and include changes in all 4 neutralising antibody binding sites in the RBD and also in antigenic sites in the S NTD. T cell epitope data is awaited. Analysis from South Africa suggests a reduction in protection from previous infection, including from recent Delta infection. There is no convalescent sera neutralisation data and no relative risk of reinfection analyses as yet. |
| **Vaccine-derived immunity** | Red | **Low** | **Mutations suggestive of reduced protection from vaccine derived immunity, no supporting evidence**<br>The mutations present are likely to reduce antibody binding and include changes in all 4 RBD neutralising antibody binding sites. T cell epitope data is awaited. There is no vaccinee sera neutralisation data and no epidemiological data on vaccine effectiveness. |
| **Therapeutics** | Red | **Low** | **Mutations suggestive of reduced effectiveness of a treatment in UK clinical use**<br>The mutations present are likely to reduce the binding of most available therapeutic monoclonal antibodies, based on structural modelling. On the same basis, they are unlikely to affect current small molecule antivirals. However, there is no laboratory or clinical data to support these predictions at present. |

* Refer to scale and confidence grading slide.

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