

City and Hackney Immunisations Strategic Action Plan 2024-27 Appendices

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Appendix 1: The Immunisation Schedule

Age	Vaccine	Doses	Age due	Diseases protected against
The routine immunisation schedule (1)				
Preschool (0-4)	DTaP/IPV/Hib/Hep B (6-in-1)	3	8, 12 and 16 weeks	Diphtheria, tetanus, pertussis, polio, Haemophilus influenza, type b (Hib), Hepatitis B
	PCV	3	8, 16 weeks and 1 year	Pneumococcal disease
	Rotavirus	2	8 and 12 weeks	Rotavirus gastroenteritis
	Men B	3	8, 16 weeks and 1 year	Meningococcal group B
	Hib/MenC	1	1 year	Meningococcal group C
	MMR	2	1 year and 3 years and 4 months	Measles, mumps and rubella
	DTaP/IPV booster (4-in-1)	1	3 years & 4 months	Diphtheria, tetanus, pertussis, polio
	Flu	1	All children aged 2 & 3	Influenza
School age (4-16)	Td/IPV (Booster)	1	4 years (Year 9)	Tetanus, polio
	HPV	2	Girls and boys aged 12-13 years	Cervical cancer, genital warts
	MenACWY	1	14 years (Year 9)	Meningococcal groups A, C, W and Y disease
Adult (17+)	Pneumococcal Polysaccharide Vaccine (PPV 23)	1	65 years	Pneumococcal (23 serotypes)
	Inactivated influenza vaccine	1	65 years of age and older	Influenza (each year from September)
	Shingles (Herpes Zoster)	1	65 years from 2023, 70 to 79 years of age, and	Shingles

Age	Vaccine	Doses	Age due	Diseases protected against
			severely immunosuppressed	
	RSV	1	Adults aged 75 on or after September 2024	Respiratory syncytial virus (RSV)
Selective immunisation programmes				
Babies born to hepatitis B infected mothers	Hep B	3	At birth, 4 weeks and 12 months old	Hepatitis B
Infants with a parent or grandparent born in a high incidence country	BCG	1	Up to 1 year to high risk babies	Tuberculosis
Children in a clinical risk group	Flu	1	From 6 months to 17 years of age	Influenza
Pregnant women	Flu	1	At any stage of pregnancy during flu season	Influenza
	Pertussis	1	From 16 weeks gestation	Pertussis
	RSV	1	From 28 weeks (commencing on or after September 2024)	Respiratory syncytial virus (RSV)
Vaccines that protect against sexually transmitted infections (STIs)				
Routine immunisation schedule	HPV	1	From 12 years old	Human papillomavirus
High-risk individuals e.g. men who have sex with men (MSM) and sex	Hepatitis A	2	N/A	Hepatitis A
	Hepatitis B	As per clinical advice.		Hepatitis B

Age	Vaccine	Doses	Age due	Diseases protected against
workers	Smallpox (MVA)	1 (with booster dose in ongoing risk)	N/A	Mpox

References

1. UK Health Security Agency (2014) *Complete routine immunisation schedule*, GOV.UK. Available at <https://www.gov.uk/government/publications/the-complete-routine-immunisation-schedule> (Accessed: 7 June 2024).

Appendix 2: Literature review of interventions shown to increase vaccination uptake

This is a review looking at the interventions outlined in existing literature which have been shown to increase vaccination uptake. The scope of this review is limited to interventions shown to have benefit within the UK, and is by no means exhaustive.

This literature review is to support the City and Hackney Immunisations Strategic Action Plan. As outlined in that plan, the vaccination uptake in Hackney is below that of other regions in the United Kingdom, and this requires attention in order to improve health inequalities, health outcomes and in particular to help address the possible impending measles crisis [1].

Barriers to uptake:

In order to identify interventions which can improve vaccination uptake, we need to explore the barriers preventing people from getting their vaccinations.

There are numerous barriers to the uptake of immunisations and they vary between population groups. However, this literature review found the key barriers to uptake to be:

- Accessibility of appointments (location, timings, lack of appointments)
- Cost (cost of travel, childcare, taking time off work)
- Concerns/fears over vaccine side effects and long term impact
- Education (lack of understanding of the importance of vaccinations, herd immunity, eligibility, immunisations schedule, lack of available resources or information in different languages)
- Lack of trust/poor relationships with healthcare professionals (including Gypsy, traveller and Roma people, the BAME population, the Charedi Jewish population, looked after children)
- Forgetting appointments (particularly prevalent in the elderly population)
- Media (increased access to social media, propagating negative messages, spreading misinformation, playing up fears (e.g. ongoing ramifications from Wakefield scandal))

'Call and Recall':

One of the strongest interventions for increasing vaccination uptake [2] mentioned in the literature was 'Call and Recall'. This involved reminding patients of appointments, rebooking forgotten appointments and actively calling back patients who were hesitant to be vaccinated. One study [3] showed that according to 71% of questioned healthcare professionals, forgetting about the vaccination appointment was the main reason for being unvaccinated. Therefore calling the patient back or rebooking these appointments would not only uphold NICE Quality Standard 1 (follow up invitations), but also help mitigate this barrier. For those patients who were hesitant about booking a vaccination appointment or getting vaccinated, a call back system with a confident and knowledgeable healthcare professional has been shown to increase vaccination uptake [4].

MECC:

Make Every Contact Count 'MECC' involves the opportunistic delivery of consistent and concise health information while encouraging conversations related to health so people are able to make informed and positive health decisions. MECC uses behaviour change evidence within existing health contacts to have brief conversations to promote desired health behaviours [5].

Primary care professionals should take a MECC approach to immunisation by promoting patients to seek out routine vaccinations during other appointments such as blood pressure checks [6]. However, as GP appointments are limited in time, other healthcare professionals have a key role to play in encouraging the uptake of vaccinations. Health visitors and midwives working with parents during pregnancy and early childhood are able to begin conversations about immunisations at an early stage. It is especially important in advising pregnant women about COVID-19, flu and pertussis vaccinations [7]. School nurses are also well placed to interact with parents and would be in a position to maintain NICE Quality Standard 4 by checking immunisation status at specific age groups. These healthcare professionals are likely to be trusted by parents and therefore in a good position to provide valuable and timely information [3].

IT systems can be set up to flag when a patient has outstanding vaccinations. It is also important to ensure that vaccinations are recorded with the appropriate codes (NICE Quality Standard 3) as this can cause discrepancies in reporting and may lead to the miss-recording of vaccinations (i.e. recording that a patient has received a vaccination when they have not and vice versa). When these systems and codings are correct and up to date, receptionists and other appropriate staff are able to check whether a patient is up to date and offer them an appointment for any missing vaccinations when they visit the GP [8]. This would have a direct positive impact on NICE Quality Standard 2 (offering outstanding vaccinations).

It is also both possible and safe to administer multiple vaccinations in one session, which makes better use of a single GP visit and can save patients time and money, increasing the likelihood of vaccine uptake if this is a barrier [9].

Access:

Another tool shown to increase vaccination uptake was increasing access to vaccination clinics [3], either through increasing the number of appointments available, extending the hours of vaccination clinics or increasing the breadth of locations for vaccination clinics. Timing and availability of vaccination appointments were the two most common barriers cited by working age adults or parents, with older adults citing availability and location as most important barriers. More than half the number of people surveyed indicated that more locations, e.g. pharmacies or high street pop-ups would be beneficial.

A population subgroup seen to be affected by lower vaccination uptake rates was the Gypsy, Roma and Traveller populations. One study shows that although their uptake and general health outcomes are poorer, they are largely supportive of vaccinations [10]. The main barriers to vaccination seem to be access and trust.

The nature of the Gypsy, Roma and Travellers' nomadic lifestyles, low literacy rates and having large families (as it is difficult to organise multiple health appointments) all have an effect on access to vaccinations [10, 11]. It is felt that healthcare professionals' lack of understanding about Traveller, Gypsy and Roma culture affected their ability to form good relationships. Furthermore, the language barrier (particularly in older generations), with few advocates available, led to suboptimal translations being used (i.e. using different, but similar, languages) with possible mis-translations.

The study [11] showed that having bilingual primary care professionals and specialist health visitors improved the relationship between these ethnicities and the healthcare network. Although 'at-home vaccinations' were considered to increase vaccination uptake, it did not affect wider healthcare system usage. Interventions such as text recalls with 'today or tomorrow' appointments or drop in centres in A+E services also showed improved vaccination uptake. Interestingly, understanding of the historical beliefs and cultural practices also improved relationships between the Gypsy, Roma and Traveller populations and healthcare providers; this alludes to the concerns around MMR and autism, as autism is stigmatised within their culture; or acceptance of HPV vaccination in teenagers implying approval of pre-marital sexual intercourse [10].

Overall, interventions proposed to increase vaccination uptake included cultural competence training, documentation of ethnic groups in healthcare records, named healthcare professionals in GP practices to aid with language barriers, signposting, etc. flexible booking systems ('today, tomorrow') and further funding for specialist health visitors.

Building Trust in HCP:

As seen in the Gypsy, Roma and Traveller population mentioned above, poor perceptions of and a lack of trust in healthcare professionals (due to institutional racism, historical medical mistreatment and cultural segregation) is a significant barrier to vaccine uptake [12]. This is also known to be true for members of the BAME population [13].

Successful interventions to tackle this include the use of trusted messengers and community advocates that are able to tailor messages to ensure they are culturally and linguistically appropriate and address relevant issues and concerns [14]. It is also important to acknowledge the mistreatment that has occurred in healthcare settings and to address historical racism and discrimination in the development of vaccines [15].

According to the Royal Society of Public Health, trust in healthcare professionals in other population groups remains very high, with doctors and nurses consistently identified as a valued source of information about vaccines [3]. The 2023 Edelman Trust Barometer Special Report on Trust and Health also identified pharmacists as the most trusted healthcare professionals after doctors and nurses [16]. The UKHSA 2023 annual parental attitudinal survey found that most parents rank healthcare professionals as their most trusted source of information [17]. In addition to doctors and nurses, parents also value the information provided by midwives and health visitors, who work with parents during pregnancy and early childhood and are able to raise timely conversations about immunisations [3].

It would therefore be pertinent to work on improving the perception of and relationship between healthcare professionals and members of the BAME population.

Education:

There are various myths and misconceptions about vaccinations, including the idea that having too many vaccinations can 'overload' the immune system and be dangerous. These myths may become particularly detrimental to vaccine uptake as more vaccinations are added to the immunisations schedule. Therefore, better education in schools on the value and safety of vaccines is vital. The Royal Society of Public Health recommends that education on the importance and value of vaccines be included in the Personal, Social, Health and Economic (PSHE) curriculum in schools or as a component in core curriculum subjects such as science [3].

One study [18] outlined that patients should be provided with educational materials that clearly communicate the risks and severity of side effects, as well as the potential negative consequences of remaining unvaccinated, compared to the benefits of immunisations as it could prove helpful in the individual deciding in favour of vaccination [5]. Information that includes the benefits of vaccination extending beyond just the benefits to the individual but also to the wider community as population/herd immunity has been shown to further increase uptake [19].

Pharmacies, shops, libraries and local community centres are well placed to disseminate accurate and up-to-date information on immunisation, as well as providing links to further information on trusted websites [20]. Evidence suggests that official NHS and PHE (now UKSHA) branded materials were among the most trusted sources of information [8]. It is also important to be aware of differences in an audience's educational level, religion and cultural beliefs in order to deliver the right message to the right group, through the right channel [21].

There are conflicting ideas on the best format to provide information on vaccination, however there is a general consensus that print media (such as posters and flyers in GP surgeries) produced by the NHS is best placed to target adults and older people, whereas social media and online resources should be used to educate children and young people [3, 8].

In order to ensure they are appropriate and accessible, promotional and educational materials should be designed and co-produced with members of the target population. Working with the people the information is aimed at helps identify the messages that will resonate with them the most and increases the likelihood of engagement and ultimately the uptake of vaccinations [6].

Education on vaccinations is important not only for those directly involved in giving vaccinations, but also for health care professionals who are in contact with those eligible for a vaccination, such as staff in GP surgeries and those who work in social care [19]. It is essential to ensure they feel confident answering questions on the process, what's in the vaccine and potential side effects, as well as being equipped with the knowledge and tools to tackle uncertainty and hesitation. There is also a need to train the wider public health workforce as approximately one in five 25-34 year olds and one in ten 18-24 year olds value the opinion of religious and community leaders, as well as social media influencers who could be underutilised sources of information about the value and importance of vaccinations [3].

Media

The influence of social media on education and knowledge on vaccination safety is a growing barrier to vaccination uptake [22]. Social media has been identified as propagating misinformation or negative information around vaccinations with 41% of parents in one study [3] stating that they are often exposed to negative information on social media, with one in ten parents expressing that they would trust this information. It is not just social media, but also traditional media, which has a lasting effect on the public's perception of vaccinations - a notable example being the Wakefield scandal in 1998 [23] and continuous exposure to this misinformation can alter attitudes to vaccination over time [24, 25]. There may be some benefit in applying efforts to limit health misinformation and 'fake news' online or via social media as this information can be spread quickly and widely with current technology [26]. The percentage of individuals trusting information on social media is even higher in the younger adults, with approximately 20% of young adults stating they would believe information found online or on social media platforms.

Out of 2000 individuals surveyed by 'Moving the Needle', 55% (69% of young adults) said they would like to see information about vaccinations on social media from organisations such as NHS England. One review [27] did in fact show that social media affected vaccine attitudes and behaviours, and this could be capitalised on to drive positive information about vaccinations. Technology can be used for regionally targeted messages via mobile texting/SMS and applications to impart the importance and safety of vaccinations for the individual and for the wider population [28].

CYP:

A study conducted by the Royal Society of Public Health (RSPH) in 2023 [29] found that children and young people would go to their parents (87%), GPs (48%) or School Nurses (38%) for information about vaccinations, and would feel encouraged to have a vaccination when people they trust gave them the information or had a vaccine themselves. There was a general consensus (58%) that being taught about vaccinations in school rather than having to find out about them by themselves would also encourage them to get vaccinated. This highlights the key role schools and school nurses play in providing trusted and reliable information on immunisations. The study also found that many CYP trust vaccines and believe they are important, but did not know what vaccines were available to them. While this highlights the positives of the current vaccination programme, further work is needed to improve awareness of vaccines and the vaccine schedule in CYP.

While the CYP in the study had concerns about vaccine side effects, they were more worried about getting sick themselves, or infecting others. 65% shared they would be more likely to get a vaccine if they were told about the positive benefits for others, especially family members and vulnerable members of the community. This view is also shared by parents in the Moving The Needle report, also produced by the RSPH [3]. It is therefore important to focus on disseminating information to both CYP and parents on herd immunity to increase rates of vaccination.

In line with the insights from other target groups discussed in this literature review, increased access was highlighted as a key intervention to facilitate vaccine uptake in CYP. Participants shared that they would be more likely to get vaccinated if they were available near their homes (55%), or provided at school (53%). During the COVID-19 pandemic, it was found

that the higher the availability of testing sites, the higher the uptake of tests, particularly in areas of higher deprivation [30], this can also be applied to immunisations.

Penalties and incentives:

The idea of using penalties and incentives as a means to increase vaccine uptake was mentioned in some of the literature, for example providing vaccination clinic staff with rewards for the number of vaccines they deliver [31]. Furthermore, in 2022, the UK government chose to mandate vaccination for all patient-facing health and social care workers in England. This was met with criticism and resistance as the repercussions of not complying were job losses and it was felt it was not the government's place to have control over personal health decisions [32]. Other countries are exploring the use of financial and non-financial incentives for getting vaccinated as well as financial penalties for parents not vaccinating their children [33], however, further research is needed to establish the efficacy of penalties and incentives as a strategy to increase vaccine uptake in the general population in the UK.

Local Trends: City & Hackney

According to the 2021 census, 21.1% of Hackney residents identified as "Black, Black British, Black Welsh, Caribbean or African" ethnicity and 10% as "Asian, Asian British or Asian Welsh" ethnicity [34]. It is therefore essential to understand these demographics when looking at factors affecting vaccination acceptance and uptake. Uptake of childhood immunisations in these populations is seen as lower than in the general population [35, 36] due to various factors such as religion, cultural beliefs, understanding of benefits and risk and migration timings. One study looking at the influence of religion on vaccination uptake found that beliefs about God's ability to bring illness and health overcame the need for vaccination and that prohibition of pre-marital sexual intercourse in Islamic religion negated the need for HPV vaccinations in teenage children. Further examples included non-religious ingredients within the vaccines, such as gelatine, as barriers to vaccination. The study highlighted the impact of migration and disease prevalence in 'home countries' having both positive and negative influences on vaccination uptake in the UK; seeing poor health outcomes in their own countries highlighted the importance of preventing infection and illness whilst in the UK, however lack of experience with immunisation-preventable diseases also conferred lack of understanding of need for, and importance of, vaccinations. Some participants in the study mentioned that meningitic rashes could not be seen in the same way on darker melanocytic skin, and therefore the flyers or photos would not apply to them. This was further observed in some Somali participants who felt that the vaccinations were not made for their specific genetic/biological makeups and would therefore be more at risk of immunisation side effects. Furthermore, language differences create huge barriers to vaccination uptake as some individuals do not understand or cannot read the information provided regarding vaccinations in order to make an informed decision. Overall, individuals were keen for personalised vaccination information which targeted the points mentioned above and acknowledged their concerns.

There is also a large Charedi community within the Hackney [37], possibly the third largest community globally after Israel and New York. There is a high rate of vaccine-preventable diseases within this community. Various models of vaccination implementation have been attempted within the Hackney Borough in order to help increase uptake within this community and therefore limit the prevalence of vaccine-preventable diseases [11]. These

have included providing flyers in Hebrew/Yiddish, community vaccination clinics, a Charedi outreach nurse, home immunisations and school clinics (during measles outbreak). The health visiting team previously also provided significant support, delivering one third of the vaccinations within the North of the Borough (although now no longer part of the immunisation structure). These implementations were mainly to target the barriers specific to the Charedi community [11]: specifically, birth order, health beliefs and access to healthcare. The birth order of a child is seen as inversely related to vaccination status, as the more children in a family, the harder it is to find childcare and time to bring children to the health centres for vaccination. Furthermore, if the older children were not unwell with vaccine-preventable diseases (VPD), it provided a sense of safety to the parents. There is also the perception that VPDs are not high risk and there may also be some mistrust in the Ministry of Health, causing lower vaccination uptake within the Charedi community [38].

Conclusion

As outlined at the start of this review, there are many barriers to vaccination uptake, and these are borough and community dependent. There seems to be a consensus across the literature available that **'MECC'**, **education and access**, be it **appointment times, locations or volume of appointments**, are the main strategies that are effective in helping increase vaccination uptake in the general population. Although there are community-specific interventions required in order to address vaccination inequalities (and therefore health outcomes), the interventions mentioned above can be implemented anywhere. In the City and Hackney boroughs, there is a wide range of demographics, including BAME and Charedi Jewish populations. It is therefore important to apply specific strategies to ensure these subpopulations are supported in accessing vaccinations.

References

1. NHS England Digital. (n.d.). *NHS Immunisation Statistics: England 2022-23*. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-immunisation-statistics/england-2022-23/copyright>

2. Gurol-Urganci, I., De Jongh, T., Vodopivec-Jamšek, V., Atun, R., & Car, J. (2013). *Mobile phone messaging reminders for attendance at healthcare appointments*. The Cochrane Library. <https://doi.org/10.1002/14651858.cd007458.pub3>
3. Royal Society for Public Health. (2018). *Moving the needle: promoting vaccination uptake across the life course*. (Pages used: 3, 11, 12, 29, 20, 24, 31, 32) <https://www.rsph.org.uk/static/uploaded/3b82db00-a7ef-494c-85451e78ce18a779.pdf>
4. Hofstetter, A. M., & Rosenthal, S. L. (2014). *Health care professional communication about STI vaccines with adolescents and parents*. *Vaccine*, 32(14), 1616–1623. <https://doi.org/10.1016/j.vaccine.2013.06.035>
5. While, A. (2021). *Evidence-based strategies to promote vaccine acceptance*. *British Journal of Community Nursing*, 26(7), 338–343. <https://doi.org/10.12968/bjcn.2021.26.7.338>
6. International Longevity Centre UK. (2021). *Ready to roll out Improving routine vaccination uptake in the UK, post-pandemic*. (Page used: 16) <https://ilcuk.org.uk/wp-content/uploads/2021/09/ILC-Ready-to-roll-out-Improving-routine-vaccination-uptake-in-the-UK-post-pandemic-1.pdf>
7. NHS England (n.d.). *Maximising uptake of antenatal vaccinations during the Autumn flu and COVID-19 vaccine programmes*. NHS England. <https://www.england.nhs.uk/long-read/maximising-uptake-of-antenatal-vaccinations-during-the-autumn-flu-and-covid-19-vaccine-programmes/>
8. UKHSA. (2019). *Increasing vaccine uptake: Strategies for addressing barriers in primary care*. <https://ukhsa.blog.gov.uk/2019/05/16/increasing-vaccine-uptake-strategies-for-addressing-barriers-in-primary-care/>
9. CDC. (n.d.). *Vaccine Safety: Multiple Vaccinations at Once*. <https://www.cdc.gov/vaccinesafety/concerns/multiple-vaccines-immunity.html>
10. Mytton, J., Bedford, H., Condon, L., Jackson, C., & Team, U. (2020). *Improving immunization uptake rates among Gypsies, Roma and Travellers: a qualitative study of the views of service providers*. *Journal of Public Health*, 43(4), e675–e683. <https://doi.org/10.1093/pubmed/fdaa100>
11. Public Health England. (2018). *Tailoring Immunisation Programmes: Charedi community, north London: Implementation of the WHO's Tailoring Immunisation Programmes (TIP)*. https://assets.publishing.service.gov.uk/media/5aec71ece5274a702130df8f/Tailoring_Immunisation_report_including_Protocols_and_research_appendix.pdf
12. British Medical Association. (2023, February 17). *Rebuilding trust in medicine among ethnic minority communities*. The British Medical Association Is the Trade Union and Professional Body for Doctors in the UK. <https://www.bma.org.uk/news-and-opinion/rebuilding-trust-in-medicine-among-ethnic-minority-communities>
13. Collaboration For Change. (2023). *Collaboration for change: Promoting vaccine uptake*. (Page used: 3) <https://collaborationforchange.co.uk/wp-content/uploads/2023/08/report.pdf>
14. National Institute for Health and Care Research. (2022). *How to increase vaccination uptake among migrant communities*. *Public Health*. doi: 10.3310/nihrevidence_55367
15. Royal College of General Practitioners. (n.d.). *Health Inequalities Hub: Increasing uptake of vaccinations for vulnerable groups of patients*. <https://elearning.rcgp.org.uk/mod/page/view.php?id=11930>

16. Edelman. (2023). *Edelman Trust Barometer Special Report on Trust and Health*. (Page used: 37)
<https://www.edelman.com/sites/g/files/aatuss191/files/2023-04/2023%20Edelman%20Trust%20Barometer%20Trust%20and%20Health1.pdf>
17. UKHSA. (2024). *Press release: 86% of parents rank NHS staff most trusted on vaccine information*.
<https://www.gov.uk/government/news/86-of-parents-rank-nhs-staff-most-trusted-on-vaccine-information>
18. Rutten, L. J. F., Zhu, X., Leppin, A. L., Ridgeway, J. L., Swift, M. D., Griffin, J. M., St Sauver, J. L., Virk, A., & Jacobson, R. M. (2021). Evidence-Based Strategies for Clinical Organizations to address COVID-19 vaccine hesitancy. *Mayo Clinic Proceedings*, 96(3), 699–707. <https://doi.org/10.1016/j.mayocp.2020.12.024>
19. NICE. (2022). *Vaccine uptake in the general population [E] Evidence review for education interventions to increase the uptake of routine vaccine*. (Page used: 95)
<https://www.nice.org.uk/guidance/ng218/evidence/e-education-interventions-to-increase-the-uptake-of-routine-vaccines-pdf-11072221746>
20. Southwark Council. (2019). *Southwark Immunisation Strategy and Action Plan 2019-2021: Improving uptake, reducing inequalities*.
<https://www.southwark.gov.uk/assets/attach/9847/Southwark-Immunisation-Strategy-and-Action-Plan.pdf>
21. National Institute for Health and Care Research. (2023). *Promoting vaccination: the right approach for the right group*. Public Health. doi: 10.3310/nihrevidence_59296
22. Wilson, S. L., & Wiysonge, C. S. (2020). Social media and vaccine hesitancy. *BMJ Global Health*, 5(10), e004206. <https://doi.org/10.1136/bmjgh-2020-004206>
23. Hussain, A., Ali, S. A., Ahmed, M. A., & Hussain, S. (2018). The Anti-vaccination movement: a regression in modern medicine. *Cureus*.
<https://doi.org/10.7759/cureus.2919>
24. J. Katsyri, T. Kinnunen, K. Kusumoto, P. Oittinen and N. Ravaja. (2016). *Negativity bias in media multitasking: The effects of negative social media messages on attention to television news broadcasts*. *PLoS One*, vol. 11, no. 5
25. E. Dube, D. Gagnon, M. Ouakki, J. a. Bettinger, M. Guay, S. Halperin, K. Wilson, J. Graham and H. Witteman. (2016). *Understanding vaccine hesitancy in Canada: Results of a consultation study by the Canadian Immunisation Research Network*. *PLoS One*, vol. 11, no. 6.
26. S. Tsugawa and H. Ohsaki. (2015). *Negative messages spread rapidly and widely on social media*. *ACM*, pp. 151-160.
27. Limaye, R. J., Holroyd, T. A., Blunt, M., Jamison, A. F., Sauer, M., Weeks, R., Wahl, B., Christenson, K., Smith, C., Minchin, J., & Gellin, B. G. (2021). *Social media strategies to affect vaccine acceptance: a systematic literature review*. *Expert Review of Vaccines*, 20(8), 959–973. <https://doi.org/10.1080/14760584.2021.1949292>
28. Wilson, K., Atkinson, K., & Deeks, S. L. (2014). *Opportunities for utilizing new technologies to increase vaccine confidence*. *Expert Review of Vaccines*, 13(8), 969–977. <https://doi.org/10.1586/14760584.2014.928208>
29. RSPH. (2023). *Children and Young People’s attitudes towards vaccinations – what they know and what they have to say*. A Royal Society for Public Health Report.
www.rsph.org.uk/static/8cff269e-9f80-4c83-94f7c71fd9df9ca9/Children-and-Young-Peoples-attitudes-towards-vaccinations-what-they-know-and-what-they-have-to-say.pdf

30. Hendricks B, Price B, Dotson T, Kimble W, Davis S, Khodaverdi M, A. Halasz, G.S. Smith, and S. Hodder. (2023). *If you build it, will they come? Is test site availability a root cause of geographic disparities in COVID-19 testing?* Public Health. 2023; 216: 21 - 26.
31. NHS England. (n.d). *Increasing health and social care worker flu vaccinations: five components.*
<https://www.england.nhs.uk/increasing-health-and-social-care-worker-flu-vaccination-s/>
32. Savic, L., Savic, S., & Pearse, R. M. (2022). *Mandatory vaccination of National Health Service staff against COVID-19: more harm than good?* British Journal of Anaesthesia, 128(4), 608–609. <https://doi.org/10.1016/j.bja.2022.01.030>
33. Gravagna, K., Becker, A., Valeris-Chacín, R., Mohammed, I., Tambe, S., Awan, F. A., Toomey, T. L., & Basta, N. E. (2020). *Global assessment of national mandatory vaccination policies and consequences of non-compliance.* Vaccine, 38(49), 7865–7873. <https://doi.org/10.1016/j.vaccine.2020.09.063>
34. ONS. (2021). *How life has changed in Hackney: Census 2021.*
<https://www.ons.gov.uk/visualisations/censusareachanges/E09000012/>
35. Forster, A. S., Rockliffe, L., Chorley, A. J., Marlow, L. A., Bedford, H., Smith, S. G., & Waller, J. (2016). *Ethnicity-specific factors influencing childhood immunisation decisions among Black and Asian Minority Ethnic groups in the UK: a systematic review of qualitative research.* Journal of Epidemiology and Community Health, 71(6), 544–549. <https://doi.org/10.1136/jech-2016-207366>
36. Fisher, H., Audrey, S., Mytton, J., Hickman, M., & Trotter, C. (2013). *Examining inequalities in the uptake of the school-based HPV vaccination programme in England: a retrospective cohort study.* Journal of Public Health, 36(1), 36–45. <https://doi.org/10.1093/pubmed/ftd042>
37. *Knowing our communities* | Hackney Council. (n.d.). Lbh-website.
<https://hackney.gov.uk/knowing-our-communities>
38. (K. Muhsen et al. *Risk factors of underutilization of childhood immunizations in ultraorthodox Jewish communities in Israel despite high access to health care services.* Vaccine 30 (2012) 2109– 2115).

Appendix 3: Immunisation Strategy (2024) Data

Executive Summary

- In 2022/23, CYP vaccination coverage in City and Hackney was significantly below the England average for all CYP vaccination types.
- Across most CYP vaccinations, City and Hackney ranked as the worst-performing area in both London and England.
- City and Hackney has witnessed a more pronounced decline in CYP vaccination coverage over the past five years (2016/17 to 2021/22) compared to the London and England averages.
- The north east of Hackney consistently records the lowest vaccination uptake for CYP and the lowest coverage for adult vaccinations, while higher uptake/coverage is observed in the west of Hackney and in the City of London.
- COVID-19 vaccination coverage increases with age.
- Females generally record higher vaccine coverage than males, though this is not consistent across ages and ethnicities.
- Among CYP, Asian populations have the highest vaccination coverage. However, for adults (aged 20 and above), white populations have the highest coverage. Black residents have the third-lowest vaccination coverage among CYP but the second-lowest coverage for adults, with the lowest coverage being among those with no ethnic information available
- Generally, residents living in the most deprived areas record the lowest vaccination coverage, while those in the least deprived areas record the highest vaccination coverage.
- City and Hackney recorded the lowest COVID-19 and flu vaccination uptake (aged 16+) in North East London (NEL) among most 'underserved' groups, except for Travellers receiving COVID-19 vaccinations. Importantly, this does not seem to be due to a lack of engagement efforts.
- Several data gaps have been identified, hindering the ability to paint an accurate picture of vaccination within the borough.

Introduction

This brief appendix presents data on childhood immunisations and COVID-19 and flu vaccinations in the City of London and Hackney. Exploring data patterns and trends provides an evidence base for planning, decision-making and subsequent immunisation initiatives.

For information on the health benefits of vaccination, see 'Recent outbreaks in City & Hackney and the wider region' and 'Impacts of a wider outbreak' in section 1.2.

Children and Young People (CYP) Vaccinations

The following vaccinations are provided by the NHS to children and young people at the following ages, [as per the national vaccination schedule](#):

- [DTaP/IPV/Hib/HepB](#): 8 weeks, 12 weeks, 16 weeks
- [Rotavirus vaccines](#): 8 weeks, 12 weeks
- [MenB vaccine](#): 8 weeks, 16 weeks, 1 year
- [Pneumococcal vaccine](#): 12 weeks, 1 year
- [Hib/MenC booster vaccine](#): 1 year
- [MMR vaccines](#): 1 year, 3 years and 4 months
- [Children's flu vaccine](#): every year until children finish Year 11 of secondary school
- [DTaP/IPV pre-school booster vaccine](#): 3 years and 4 months
- [HPV vaccine](#): 12 to 13 years
- [Td/IPV teenage booster vaccine](#): 14 years
- [MenACWY vaccine](#): 14 years

Coverage

In 2022/23, CYP vaccination coverage¹ in City and Hackney was statistically significantly lower than the England average across all vaccination types². City and Hackney also recorded statistically significantly lower coverage compared to the London average for all vaccination types, except HPV at 12 to 13 years old.

For most CYP vaccinations, City and Hackney is ranked as the worst-performing area in both London and England. However, in general, the difference in vaccination coverage between City and Hackney and the London/England average is smaller for vaccinations administered during adolescence, as shown in Table 1. (1)

Table 1: Percentage of the population immunised by vaccination type and area of residence, coverage, 2022/23.

¹ 'Coverage' refers to the percentage of eligible individuals who have been invited to take part in a recommended vaccination program and have actually participated. This differs from uptake, which uses all eligible populations as a denominator.

² Comparative data for Hep B was not available.

	Vaccination type	City and Hackney	London	England
Pre-school immunisations	DTaP/IPV/Hib (three doses by 12 months)	67.8%	87.6%	91.8%
	DTaP/IPV/Hib (three doses by 24 months)	70.8%	87.4%	92.6%
	Rotavirus (two doses by 12 months)	62.8%	84.4%	88.7%
	MenB (two doses by 12 months)	67.3%	86.4%	91.0%
	MenB booster (booster by 24 months)	61.7%	79.4%	87.6%
	Pneumococcal conjugate (two doses by 12 months)	73.0%	89.8%	93.7%
	Pneumococcal conjugate (booster by 24 months)	67.7%	80.4%	88.5%
	Hib/MenC booster (booster by 24 months)	63.4%	81.3%	88.7%
	MMR (one dose between 12 and 24 months)	68.1%	82.4%	89.3%
	MMR (one dose between 12 months and five years)	81.2%	86.6%	92.5%
	MMR (two doses between 12 months and five years)	56.3%	74.0%	84.5%
	DTaP/IPV pre-school booster (booster by five years)	54.2%	72.7%	83.3%
School age immunisations	HPV (first dose at 12 to 13 years old, females)	61.7%	61.6%	69.6%
	HPV (first dose at 12 to 13 years old, males)	55.0%	56.1%	62.4%
	HPV (second dose at 13 to 14 years old, females)	60.0%	63.0%	67.3%
	HPV (second dose at 13 to 14 years old, males)	54.6%	59.7%	62.4%
	MenACWY (one dose by 15 years)	69.1%	75.3%	79.6%

Uptake source: (1)

Coverage source: (2)

Notes: Data on the Td/IPV teenage booster vaccine was not available via the listed source> However, Td/IPV data is available at a local authority level via ImmForm, which the PHIT does not currently have access to. HPV and MenACWY data presented for 2021/22. Flu data presented below in the 'Flu vaccination' section. **Green** in the City column indicates where uptake falls above the WHO target of 95%. Colours in the 'City and Hackney' column are used for comparison with London: **red** indicates statistically significantly lower coverage than the London average, while **orange** indicates statistically similar coverage.

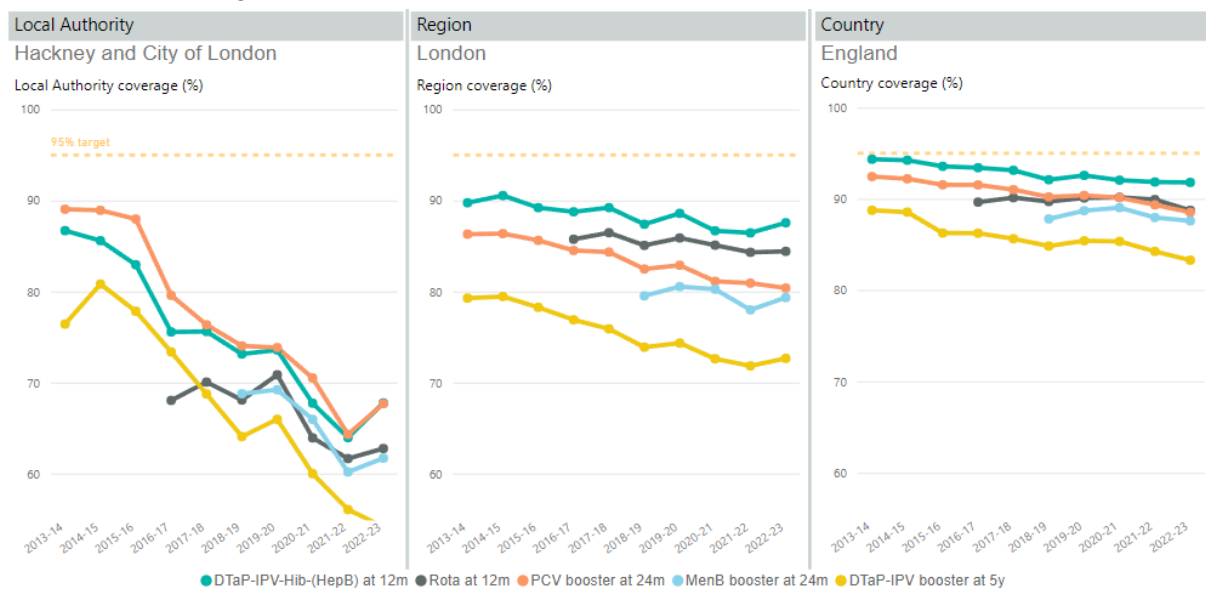
Trends over time

On average, over the past five years (2016/17 to 2021/22), there has been a decline in national CYP vaccination coverage. This trend has been more pronounced in London than England, and more pronounced in City and Hackney than London.

In City and Hackney, the only type of CYP vaccination to experience increased coverage between 2016/17 and 2021/22 has been MenACWY, which rose from 63% to 69% coverage. However, MenACWY coverage in City and Hackney was statistically significantly lower than the average for England across all five years, and statistically significantly lower than the London average in all years except 2019/20. (1)

Figure 1 shows trends in vaccination coverage for five different vaccination types, chosen to represent different age points. In all instances, City and Hackney not only recorded lower coverage than the London and England averages, but also showed a higher rate of decline. (3)

Figure 1: Percentage of the population immunised by vaccination type, year, and area of residence, coverage



Source: (3)

Notes: 'Rota' is short-hand for the rotavirus vaccine, 'PCV' is the pneumococcal conjugate vaccine.

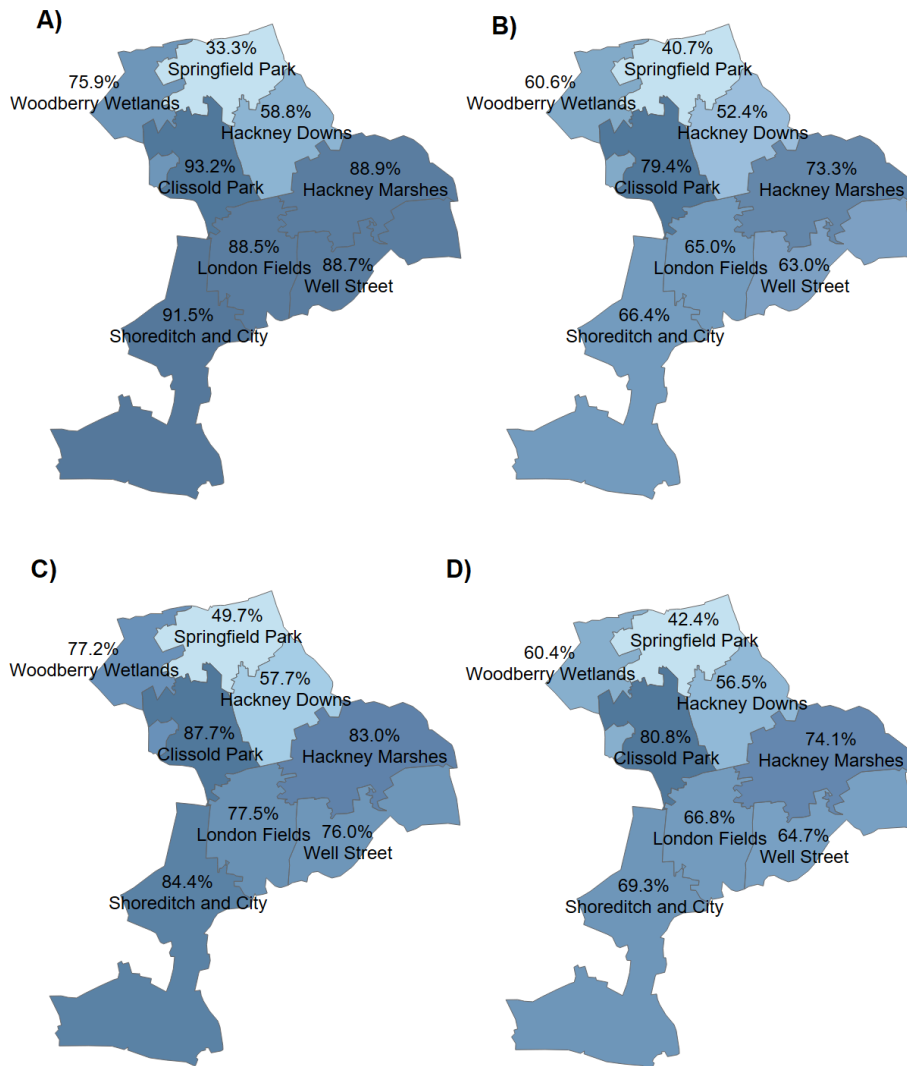
Geographic variation

Across all CYP vaccinations, Clissold Park Primary Care Network (PCN) records the highest vaccination uptake³, while PCNs in the north east of Hackney, namely Springfield Park and Hackney Downs, consistently record the lowest vaccination uptake. All other PCNs show

³ 'Uptake' refers to the percentage of eligible individuals who participate in a recommended vaccination program. This differs from coverage, which uses eligible populations that have been invited to take part in a vaccination programme as a denominator.

relatively similar levels of uptake and consistent rankings. Figure 2 illustrates the general patterns observed for vaccinations given at different age points.

Figure 2: Percentage of the population immunised by vaccination type and PCN of residence, uptake, 2022/23: A) DTaP/IPV/Hib/HepB (12 months), B) DTaP/IPV booster (5 years), C) MMR primary (24 months), D) MMR booster (5 years)



Source: (2)

BCG vaccination

The [BCG vaccine](#) is not routinely given as part of the NHS vaccination schedule; however, it is recommended for certain CYP (and adults) at a higher risk of contracting tuberculosis (TB). High risk groups include CYP whose parent or grandparent was born in a country with an elevated risk of TB, those who were born in or who have lived in such a country, or those who have been living with or in regular close contact with someone who has or had TB.

Of the residents eligible for a BCG vaccination in City and Hackney between July and September 2023, 70% received a dose before reaching three months of age. This rate fell below the London average of 77% and was the second lowest in North East London (NEL),

behind Waltham Forest at 59%. In terms of BCG doses administered before a patient's first birthday, City and Hackney ranked third highest among the seven NEL areas, with 82% of eligible residents receiving a dose. This figure compared to a London average of 81%. (4)

COVID-19 and Flu

Vaccination coverage is known to vary by population group. For most vaccination types, local data by vaccination type and population group is not currently available. However, detailed information on local COVID-19 and flu vaccination rates across various population groups is available and presented below. It is assumed that the patterns observed for these types of vaccination are generally representative of those for other types of vaccination.

COVID-19 Vaccination: CYP

COVID-19 vaccination data for residents of City and Hackney aged 19 and under are presented below. Up-to-date data is presented by ethnicity and deprivation, while historical data is provided by sex and geography due to changes in the available data.

Sex

Historic data shows that, as of April 2023, 33% of female residents and 32% of male residents aged between 12 and 19 had received at least one dose of the COVID-19 vaccine. This trend remained consistent across all ethnic groups, with the exception of 'mixed' and 'other' categories, where slightly higher rates were observed among males. (5)

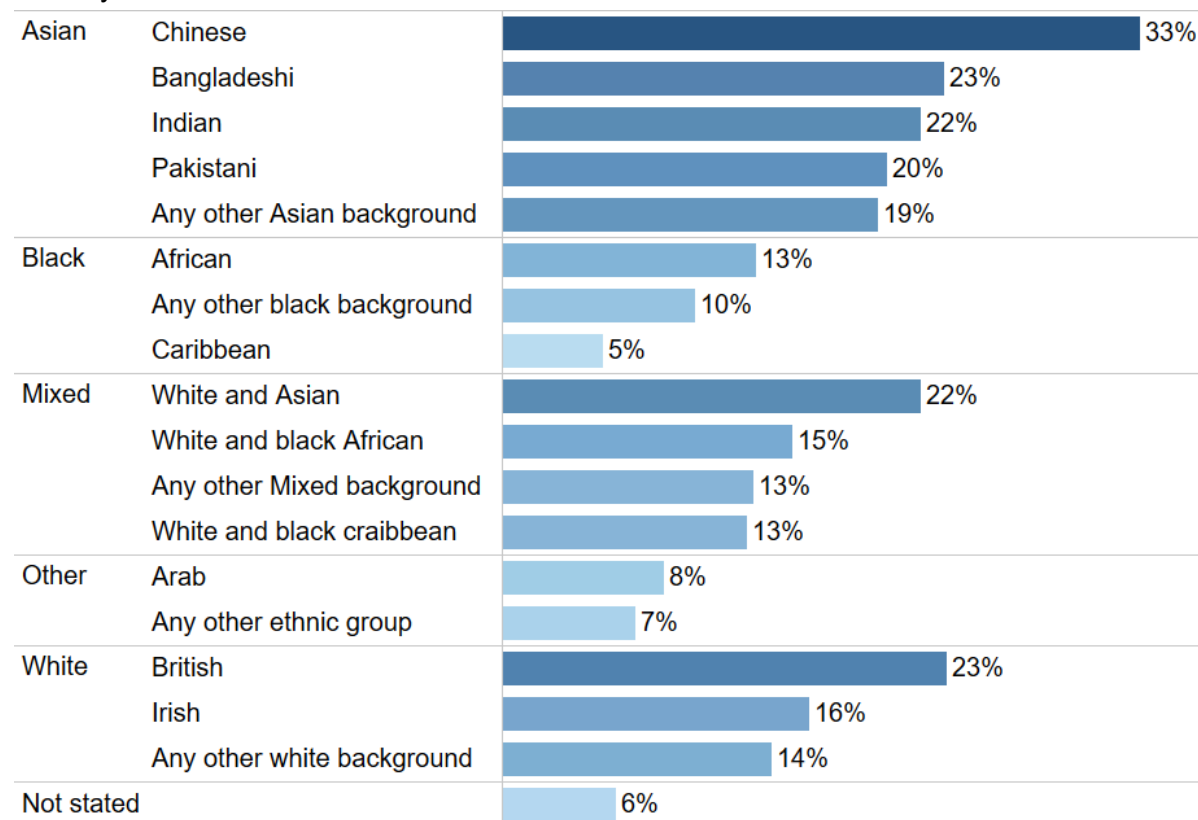
Ethnicity

As of January 2024, 13% of residents aged 19 and under had received at least one dose of the COVID-19 vaccine. This varied considerably by ethnic group, with Asian populations recording the highest vaccination coverage at 22%.

When looking at ethnic subgroups (Figure 3.), Chinese residents recorded the highest vaccination coverage, whereas Caribbean residents recorded the lowest vaccination coverage.

Figure 3: Percentage of the population aged 19 and under that have received at least one dose of the COVID-19 vaccine by ethnic subgroups, City and Hackney residents, coverage,

January 2024



Source: (5)

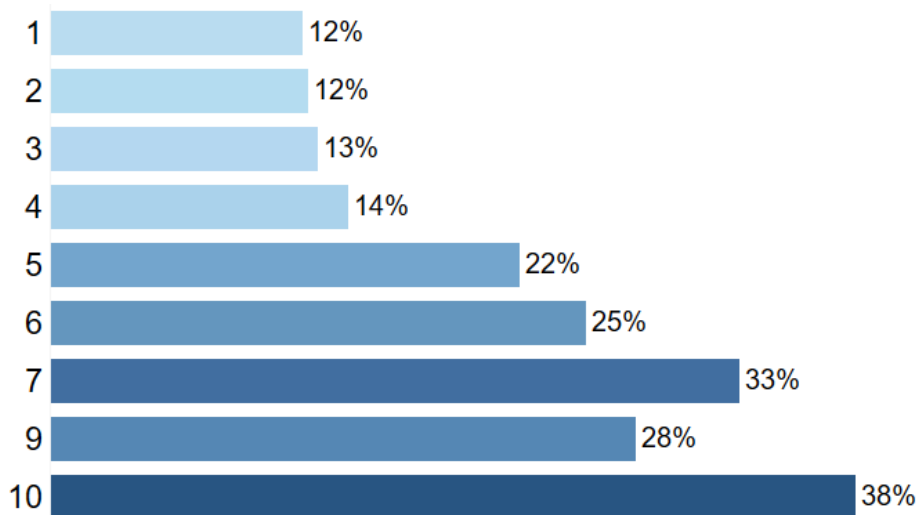
Notes: Gypsy and Irish traveller residents excluded because of small counts.

IMD

The proportion of the population aged 19 and under that have received any dose of the COVID-19 vaccine also varies by levels of deprivation. Residents in the most deprived areas record the lowest vaccination coverage, while residents in the least deprived areas record the highest vaccination coverage (Figure 4).

Figure 4: Percentage of the population aged 19 and under that have received at least one dose of the COVID-19 vaccine by deprivation decile of residence (Index of Multiple Deprivation (IMD) 2019, 1 = most deprived, 10 = least deprived), coverage, City and

Hackney residents, January 2024



Source: (5)

Notes: No residents live in areas considered to be in the IMD's 8th decile.

COVID-19 Vaccination: Adults

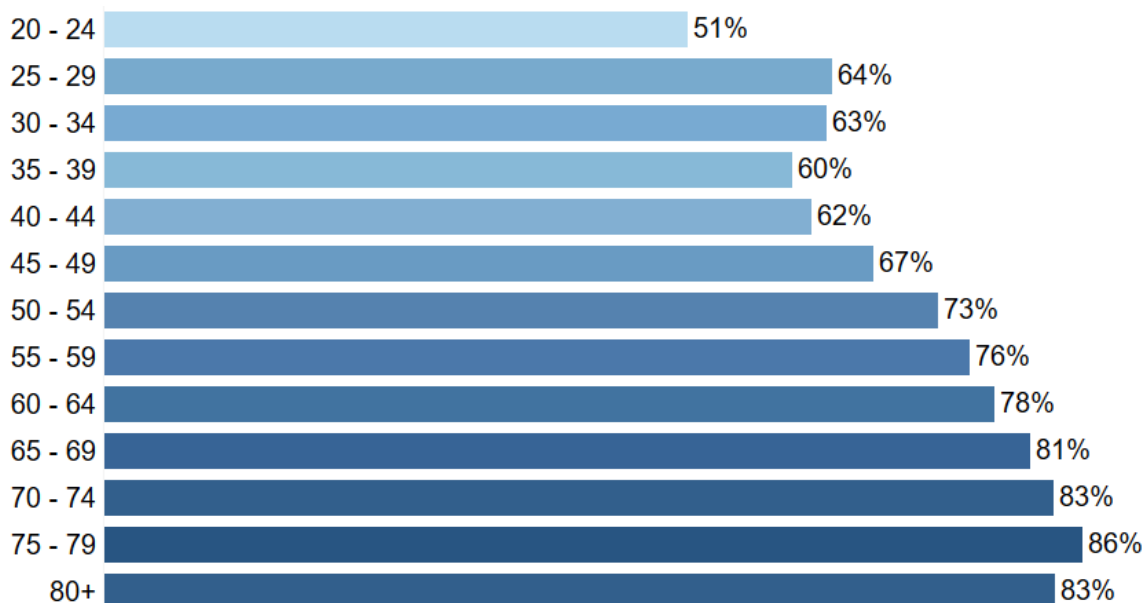
As of January 2024, 66% of City and Hackney residents aged 20 and over had received at least one dose of the COVID-19 vaccine (70% in City and 66% in Hackney). This compared with 70% in London as a whole. (5)

Age

In City and Hackney, the percentage of people who had received at least one dose of the COVID-19 vaccine increased with age (Figure 6). Some of this may be due to vaccination prioritisation for older residents and phased vaccine rollout plans. However, all residents aged 20 and over have been eligible for a first dose of the COVID-19 vaccine.

Therefore, this trend is more likely to reflect factors such as accessibility to healthcare services and routine check-ups, which tend to favour older residents; increased perception of risk among older residents; and targeted government communication and awareness campaigns.

Figure 6: Percentage of the adult population (aged 20+) that have received at least one dose of the COVID-19 vaccine by age group, coverage, City and Hackney residents, January 2024



Source: (5)

Sex

Similarly to what is observed for CYP COVID-19 vaccination data, up-to-date COVID-19 vaccination data for adults broken down by sex is unavailable. However, historical data indicates that, as of April 2023⁴, 71% of female residents and 67% of male residents aged 20 and over had received at least one dose of the COVID-19 vaccine. (5)

This female/male divide, with females recording a higher vaccination coverage, remained consistent across all age groups until the age of 70 to 74. Beyond this point, a larger percentage of males had received at least one vaccine dose compared to females. This female/male divide was also observed in all ethnic groups except for residents in the 'Other' category. (5)

Ethnicity

Unlike CYP, white adults in Hackney record the highest vaccination coverage. Additionally, Black adult residents record the second lowest vaccination coverage, falling below those from 'Other' ethnicities: (5)

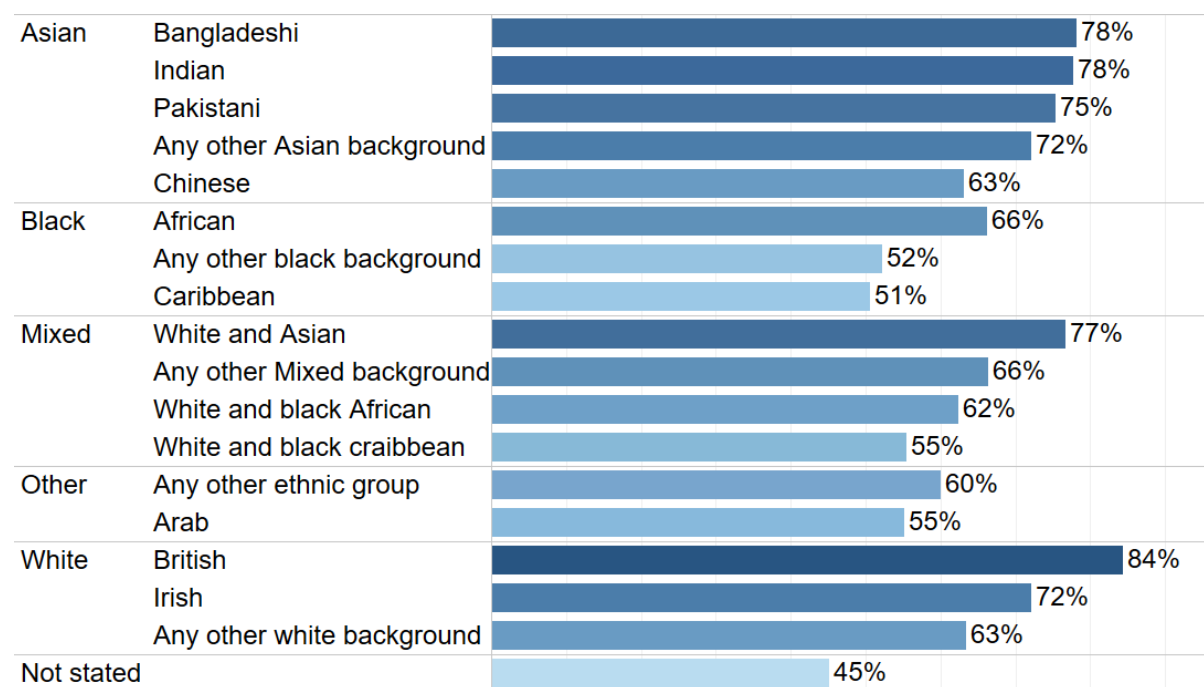
- White: 74%
- Asian: 73%
- Mixed: 64%
- Other: 60%
- Black: 58%
- Not stated: 45%

Some of this difference seems to be driven by Chinese populations, who record the highest vaccination coverage among residents aged under 20 but the 11th highest vaccination

⁴ Higher vaccination coverage in April 2023 than January 2024 are attributed to a more significant increase in the denominator than in the vaccinated population. When the denominator increases at a faster rate than the vaccinated population, the proportion of the vaccinated population decreases.

coverage for residents aged 20 and over. Additionally, African and Caribbean residents maintain a similar ranking for both children and young people (CYP) and adults. However, the 'any other black background' group records comparatively low vaccination coverage for adults, whereas adult Arab residents and residents from 'any other ethnic group' record comparatively high vaccination coverage (Figure 7).

Figure 7: Percentage of the adult population that have received at least one dose of the COVID-19 vaccine by ethnic subgroups, coverage, City and Hackney residents, January 2024



Source: (5)

Notes: Gypsy and Irish traveller residents excluded because of small counts.

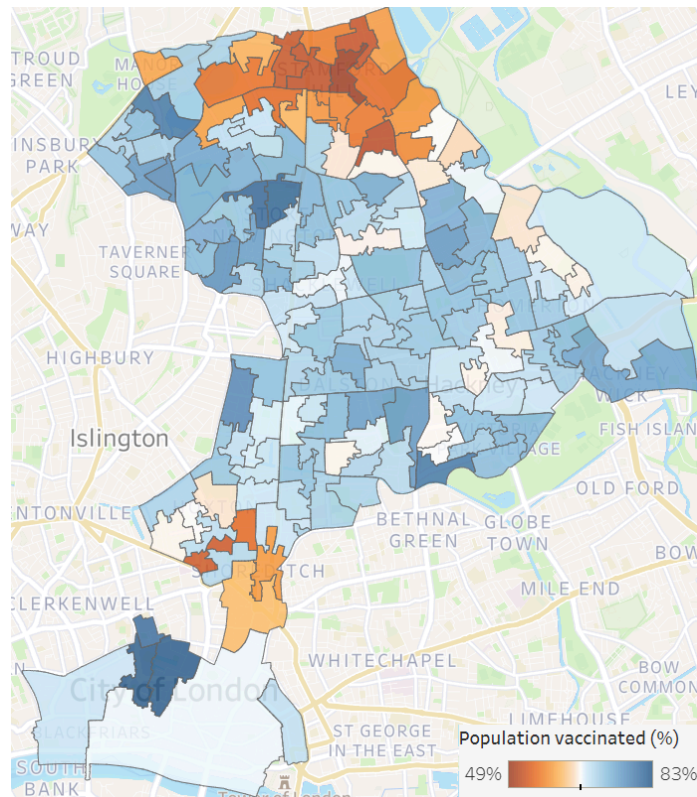
IMD

In general, residents aged 20 and over in City and Hackney see vaccination coverage rise as the level of area deprivation decreases. However, in areas with an IMD score of 7 (1 being the most deprived, 10 being the least deprived), an exception is observed: as of January 2024, only 63% of the 2,300 residents had received at least one dose of the COVID-19 vaccine, lower than the average for other IMD deciles. This phenomenon is specific to the City of London, as Hackney areas do not exceed a deprivation level of 6. (5)

Geography

Historical data show that, as of April 2023, the lowest vaccination coverage for adults was observed in the extreme north and south of Hackney, while the highest coverage was found in pockets across the west and in the north of the City of London, particularly around the Barbican (Figure 9).

Figure 9: Percentage of the adult population that have received at least one dose of the COVID-19 vaccine by Lower Super Output Area (LSOA)⁵, coverage, City and Hackney residents, April 2023

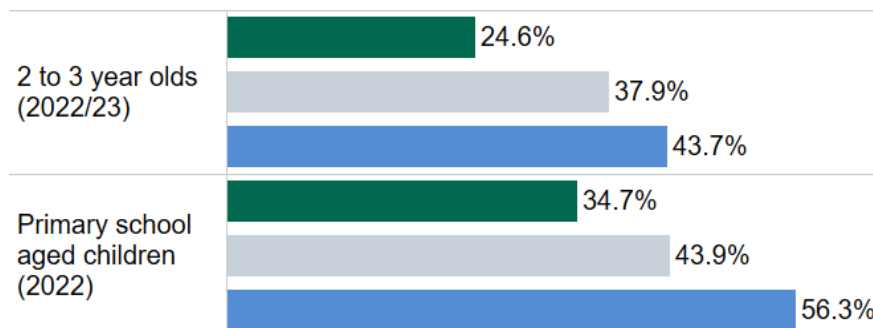


Source: (5)

Flu Vaccination: CYP

City and Hackney’s flu vaccination coverage is statistically significantly lower than both the London and England average for vaccinations given to both 2 to 3 year olds and to primary school aged children (Figure 10).

Figure 10: Percentage of the population that received a flu vaccination by area of residence and vaccination cohort



⁵ Lower Layer Super Output Areas (LSOAs) are small geographical areas consistent in population size, with between 1000 and 1500 residents.

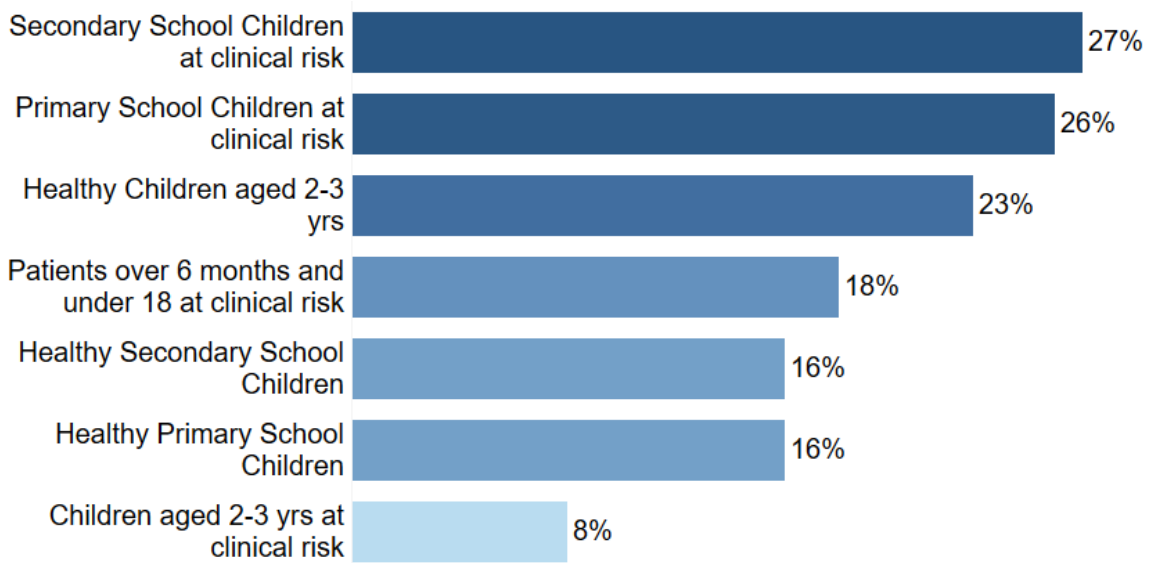
- City and Hackney
- London
- England

Source: (1)

Population group

Flu data for child sub-groups is available at a local level. This shows that among those groups, children aged 2 to 3 years old at clinical risk recorded the lowest uptake between September 2023 and January 2024 (Figure 11).

Figure 11: Percentage of the CYP population that received a flu vaccination by population group and area of residence, uptake, September 2023 to January 2024

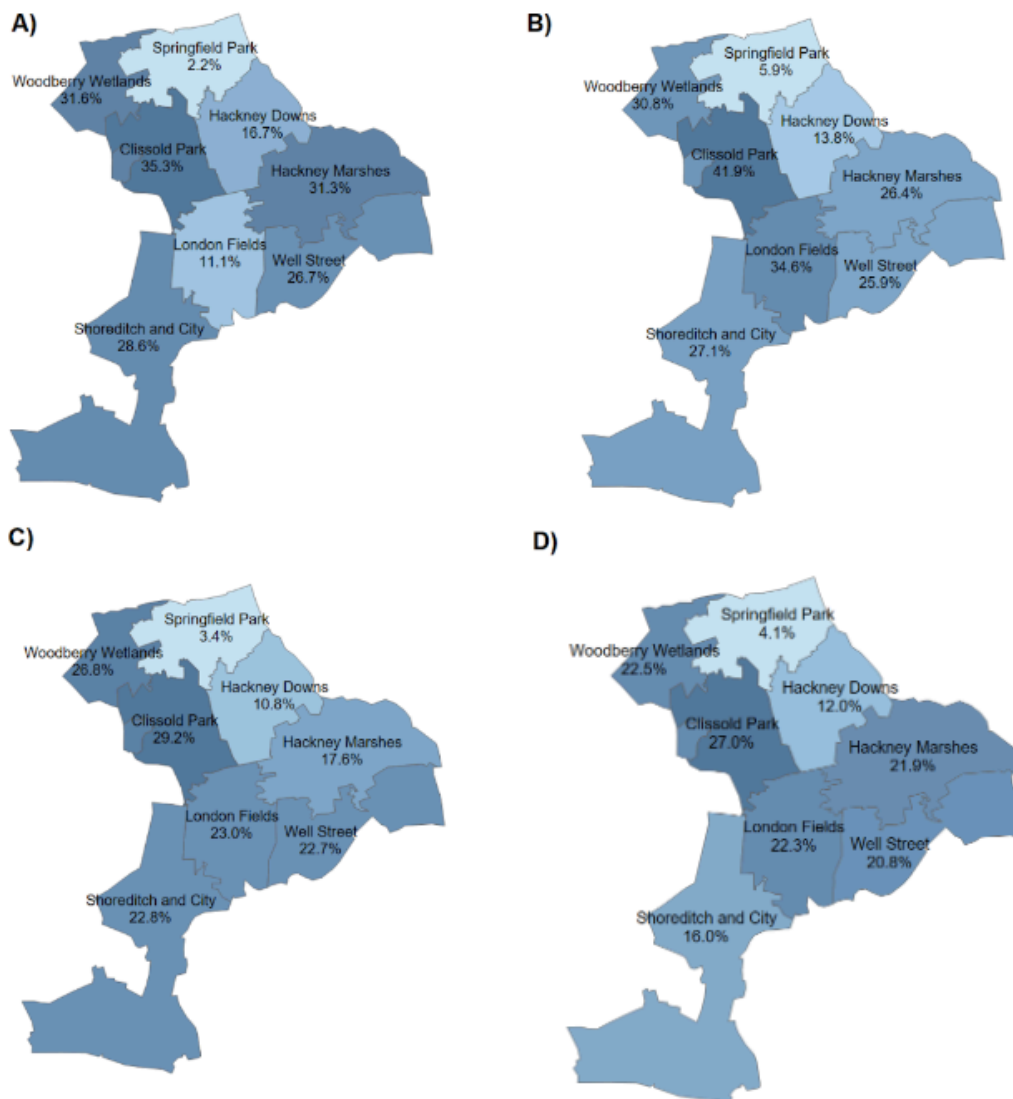


Source: (6)

Geography

When mapping the uptake for these groups based on geography, a familiar trend emerges: the lowest levels of vaccination uptake are recorded in the northeast of Hackney, specifically in Springfield Park, while the highest levels of uptake tend to be reported in the northwest of Hackney. Of note is the particularly high vaccination uptake recorded among secondary school-aged residents at clinical risk in Clissold Park. In this PCN, 45% of the eligible residents received a flu vaccination between September 2023 and January 2024, surpassing the borough average of 27%.

Figure 12: Percentage of the population that received a flu vaccination by population group and PCN, uptake, City and Hackney residents, September 2023 to January 2024. A) Children aged 2 to 3 years old at clinical risk, B) Healthy children aged 2 to 3 years old, C) Healthy primary school children, D) Healthy secondary school children.

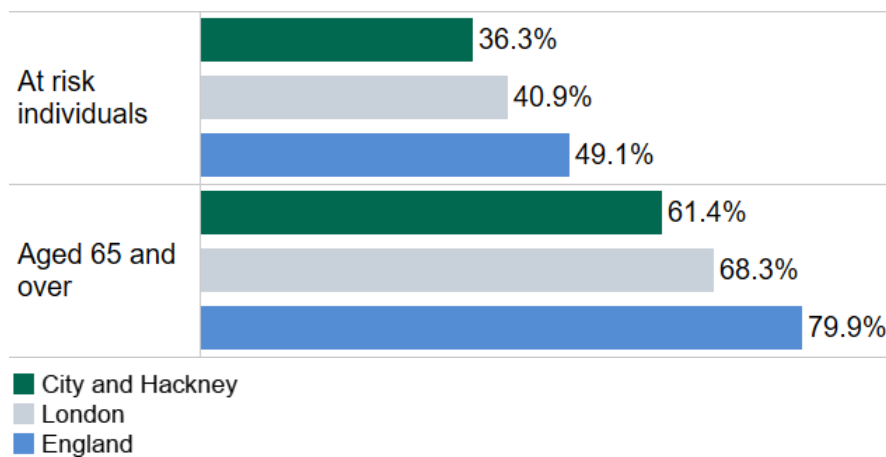


Source: (6)

Flu Vaccination: Adults

Local-level flu vaccination data, similar to that available for children, is available for adults. And similar trends are seen for this cohort: at an aggregate level, City and Hackney's flu vaccination coverage is statistically significantly lower than both the London and England average for vaccinations given to both 'at risk' residents aged up to 65 (excluding pregnant women) and all residents aged 65 and over (Figure 13).

Figure 13: Percentage of the population that received a flu vaccination by area of residence and vaccination cohort, 2022/23

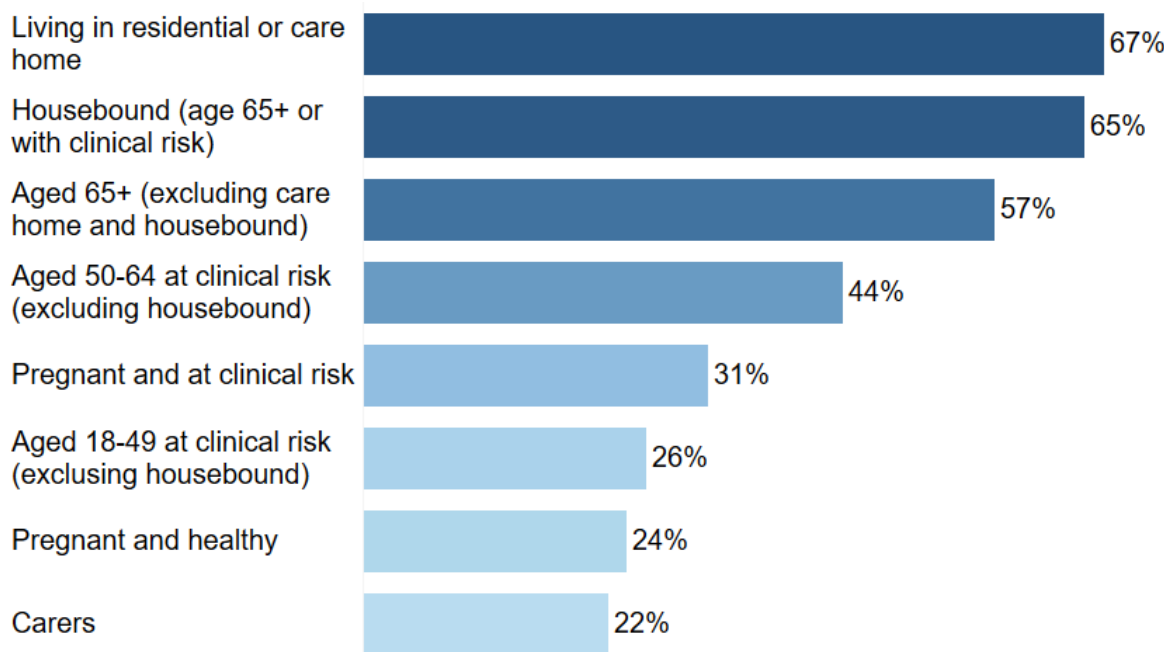


Source: (1)

Population group

Again, adult vaccination uptake is seen to vary by sub-group. Residents living in residential or care homes and residents aged 65 and over who are housebound and at clinical risk record the highest flu vaccination uptake, while carers record the lowest vaccination uptake. Unsurprisingly, groups considered to be at ‘clinical risk’ tend to record higher levels of uptake (Figure 14).

Figure 14: Percentage of the adult population that received a flu vaccination by population group, uptake, City and Hackney residents, September 2023 to January 2024



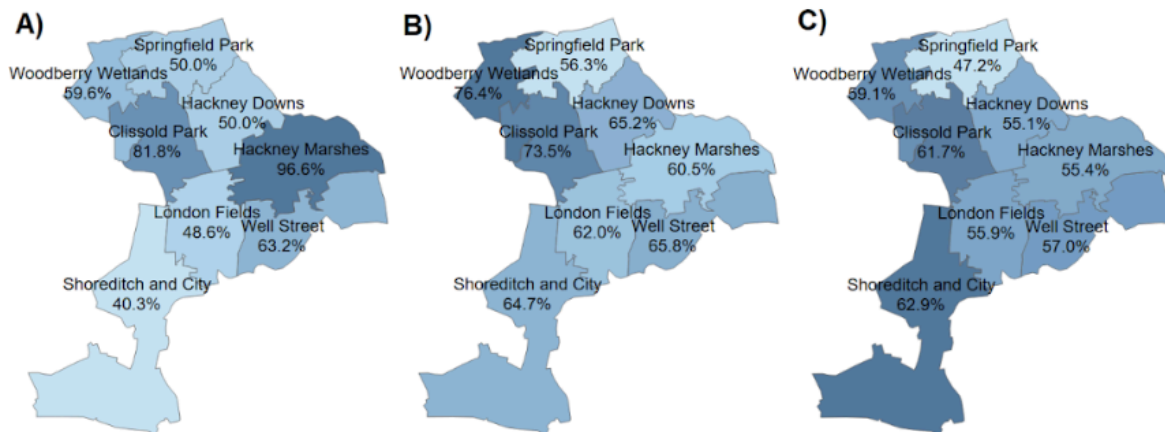
Source: (6)

Geography

Similarly to CYP vaccinations and COVID-19 vaccinations, adult flu vaccination uptake also varies by geography. The lowest levels of uptake are recorded in the north-eastern part of the borough, particularly in Springfield Park. This is with the exception of residents living in

residential or care homes, who see the lowest levels of vaccination uptake recorded in Shoreditch and City (Figure 15). It's worth noting that the population base for some of these cohorts when broken down by PCN is relatively small, particularly for residents living in residential or care homes and pregnant residents at clinical risk, with counts falling as low as five by PCN.

Figure 15. Percentage of the population that received a flu vaccination by population group and PCN, uptake, City and Hackney residents, September 2023 to January 2024. A) Residents living in a residential or care home, B) Housebound residents aged 65+ with clinical risk, C) Residents aged 65+ (excluding care home and housebound).



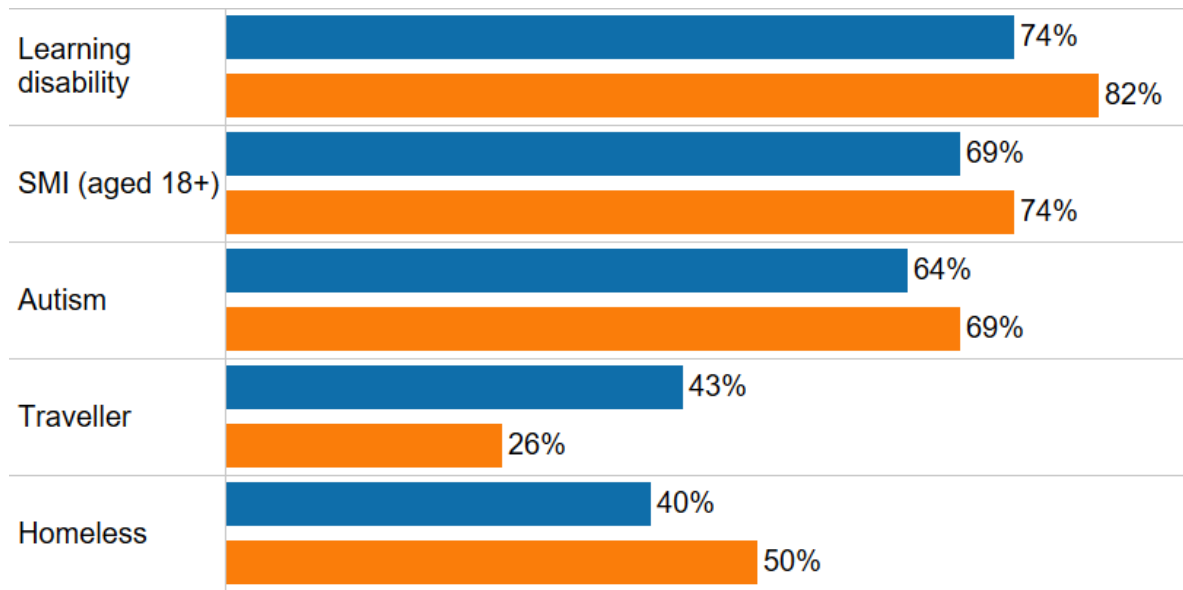
Source: (6)

COVID-19 and Flu Vaccination: Underserved Populations

Aggregate COVID-19 vaccination data for 'underserved populations' (autistic residents, homeless residents, those with learning difficulties, residents with severe mental illnesses (SMI), and residents from the traveller ethnic group) aged 16 and over is available at a local authority level up to January 2024.

City and Hackney recorded the lowest COVID-19 vaccination uptake in NEL among all 'underserved' groups, except for Travellers, when looking at first doses of the COVID-19 vaccine. This is despite high levels of engagement: City and Hackney had the highest percentage of declined invitations among all underserved populations. Furthermore, City and Hackney were among the areas with the highest invitation rates for all underserved groups, having the highest invitation rate for individuals with autism and the second-highest rate for homeless and Traveller residents.

Figure 16: Percentage of the population aged 16 and over that have received at least one dose of the COVID-19 vaccine by 'underserved' group and area of residence, uptake, January 2024

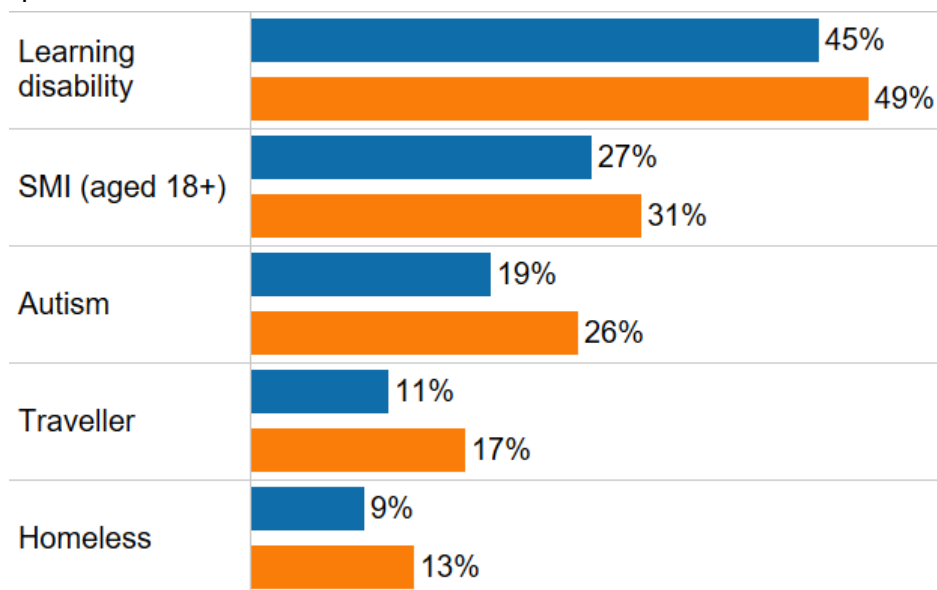


■ City & Hackney
 ■ NEL

Source: (7)

Local level flu data is also available for the same ‘underserved groups’ as COVID-19 data is available for. Similarly to the COVID-19 data, this shows that City and Hackney consistently record lower levels of vaccination uptake compared to the NEL average (Figure 17). This difference is especially noticeable among residents with autism (27% below NEL average), Travellers (35% below NEL average) and homeless residents (31% below NEL average).

Figure 17: Percentage of the population aged 16 and over that received a flu vaccination between September 2023 and January 2024 by ‘underserved’ group and area of residence, uptake

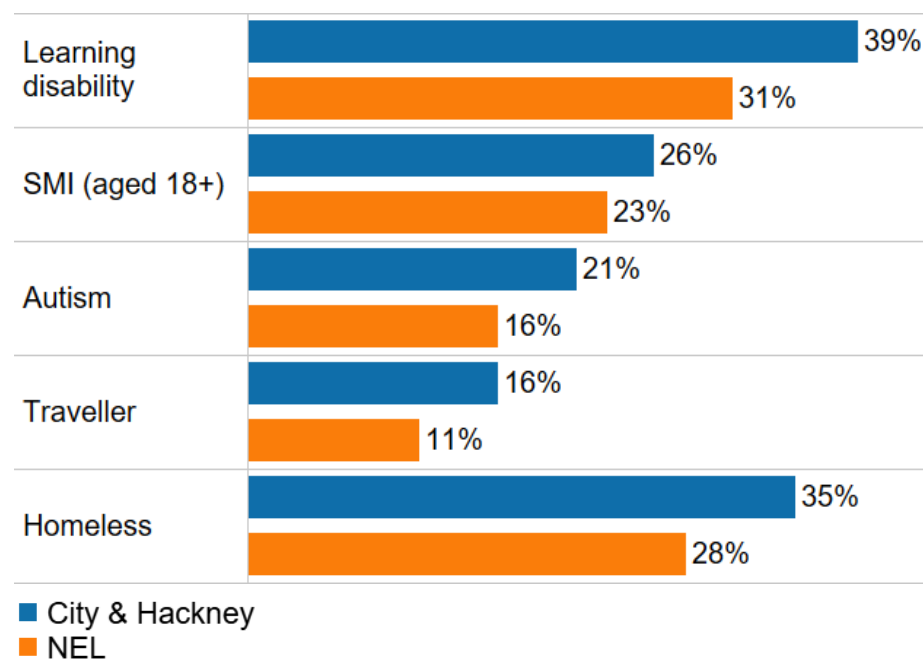


■ City & Hackney
 ■ NEL

Source: (8)

However, again, City and Hackney consistently show high levels of engagement: City and Hackney recorded the highest percentage of declined invitations among all underserved populations (see Figure 18). Unlike COVID-19, data on invitations is not available for flu.

Figure 18: Percentage of the population that indicated they declined or were contraindicated for vaccination, did not provide consent, or were allergic and thus could not receive the flu vaccine between September 2023 and January 2024 by underserved group and area of residence



Source: (8)

Data Gaps

Unfortunately, certain data breakdowns necessary for a comprehensive understanding of vaccine uptake across the borough have been unavailable, limiting the overall picture. The identified data gaps for CYP, COVID-19 and flu vaccines are listed below. It is acknowledged that some of this data, such as COVID-19 data by gender, may be available through platforms like ImmForm. However, as of the time of writing (February 2024), the City and Hackney Public Health Intelligence Team (PHIT) did not have access to these platforms.

CYP-specific vaccinations

- **Sociodemographic⁶:** CYP vaccination data broken down by sex, ethnicity and IMD is not available.
- **Key inclusion groups:** Data for key inclusion groups, including looked-after children, children with autism, children with learning disabilities, and children known to the youth justice service, is not available.

⁶ 'Socio-demographic' refers to the social and demographic characteristics of a population, including factors such as age, sex, ethnicity, and deprivation.

- **Geography:** Some CYP vaccination data (see Table 2 below) is available by borough, PCN, and GP practice. However, data specific to schools and bespoke geographic areas, such as LSOA and ward, is not currently available.
- **Td/IPV teenage booster:** No local-level data is available for the Td/IPV teenage booster vaccine.
- **BCG:** BCG data is only available at a combined City and Hackney level and is not available by population group.

COVID-19 vaccination

- **Sociodemographic:** COVID-19 vaccination data is available by age group, ethnic subgroup, and IMD. However, up-to-date data broken down by sex is not available, and data for sociodemographic groups in combination is limited (e.g., age X in ethnic group Y in IMD Z).
- **Key inclusion groups:** COVID-19 vaccination data broken down by inclusion group is presented for some 'underserved' groups. However, no data is presented for underserved residents under the age of 16. Furthermore, COVID-19 data is not presented for the following key inclusion groups: looked after children, children known to the youth justice service, and asylum seekers.
- **Geography:** COVID-19 vaccination data for all residents is available by borough. However, up-to-date LSOA-level data for the entire resident population is no longer available to the PHIT. Data for specific population groups, including residents aged over 65, residents residing in residential or care homes, and those deemed to be at clinical risk, is available by borough, PCN, and GP practice.

Flu vaccination

- **Sociodemographic:** Flu vaccination data is not available by sociodemographic. However, aggregate vaccination data is available for some population groups, including school-aged children, residents at clinical risk, and carers.
- **Key inclusion groups:** Similarly to COVID-19, flu vaccination data broken down by inclusion group is presented for some 'underserved' groups. However, no data is presented for underserved residents under the age of 16 or for the following key inclusion groups: looked after children, children known to the youth justice service, and asylum seekers.
- **Geography:** Flu vaccination data for specific population groups, including residents aged over 65, residents residing in residential or care homes, and those deemed to be at clinical risk, is available by borough, PCN, and GP practice.

Area-specific data

The City and Hackney Public Health team encounters a unique challenge in that data providers often combine data for these two markedly distinct areas. While geographical neighbours, City and Hackney are home to very different population groups: the City of London is considered one of England's least deprived areas, characterised by a predominantly white and relatively old population. Whereas Hackney is among England's most deprived areas, and is characterised by its rich cultural and ethnic diversity and

relatively young population. Therefore, combining data from these areas can obscure the specific needs of each community. Table 2 shows which vaccination data is and isn't available for City and Hackney separately, and the lowest level of geography available for each vaccination type.

Table 2. Vaccination data by vaccination type and geographic breakdown

Vaccination type	Combined or individual area data	Lowest level of geography available
DTaP/IPV/Hib/HepB	Individual	GP practice
Rotavirus	Individual	GP practice
MenB	Individual	GP practice
Pneumococcal	Individual	GP practice
Hib/MenC booster	Individual	GP practice
MMR	Individual	GP practice
DTaP/IPV booster	Individual	GP practice
HPV	Combined	City and Hackney
Td/IPV teenage booster*	N/A	N/A
MenACWY	Combined	City and Hackney
BCG	Combined	City and Hackney
COVID-19	Individual	GP practice
Flu	Individual	GP practice

Notes: *It is understood that data for the Td/IPV teenage booster vaccine is available at a local authority level via ImmForm. However, the PHIT currently does not have access to this platform.

A further problem faced by the City of London is that even when data is provided by PCN and/or GP practice, it is often based on the population registered with GPs in the City of London, rather than the resident population. The City of London only has one GP practice, Neaman Practice, which serves 78% of the City of London's total population. Therefore, when data by GP is available, it is recommended that data from two GPs in Tower Hamlets (Goodman's Field and Spitalfields Practice) is used in addition to data from the Neaman Practice. Goodman's Field serves 10% of the City of London's total population, with 2% of its registered patients being City of London residents. For Spitalfields Practice, these figures stand at 8% and 5%, respectively. Table 3 shows vaccination uptake for the MMR vaccine available for these practices and relevant geographies.

Table 3: MMR uptake within the GP practices that City of London residents are mostly registered with, as well as by relevant geographies (data from 2022/23).

GP Practice / Geography	1 x MMR dose at 24 months	2 x MMR doses at 5 years
Goodman's Field GP	80%	75%
Spitalfields GP	84%	88%
Neaman Practice	87%	82%
City & Hackney	69%	60%
Tower Hamlets	84%	80%
London	82%	74%
England	89%	85%

References

1. Office for Health Improvement and Disparities (OHID). Public health profiles - OHID [Internet]. Available from: <https://fingertips.phe.org.uk/>
2. Clinical Effectiveness Group (CEG). City and Hackney Childhood Immunisations Dashboard - End of Year Report 2022/23. 2023.
3. UK Health Security Agency (UKHSA). Childhood Vaccination Coverage Statistics [Internet]. 2023. Available from: <https://app.powerbi.com/view?r=eyJrIjoiZTI3NWZhNzItMTlyZS00OWM2LTg0MzMtOGY5YTJjMGY0MjllIiwidCI6IjUwZjYwNzFmLWJiZmUtNDAxYS04ODAzLTY3Mzc0OGU2MjllMjllMmMiOjh9>
4. UK Health Security Agency (UKHSA). Quarterly GP vaccination coverage statistics for children aged up to 5 years in England 2023 to 2024: quarter 2, July to September 2023 [Internet]. Cover of vaccination evaluated rapidly (COVER) programme. 2023. Available from: <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2023-to-2024-quarterly-data>
5. UK Health Security Agency (UKHSA). Local Authority Data Access Platform (LADAP). 2024.
6. Clinical Effectiveness Group (CEG). NEL Seasonal Flu Vaccination programme 2023-24. 2024.
7. Clinical Effectiveness Group (CEG). COVID-19 Underserved Populations. 2024 Jan.
8. Clinical Effectiveness Group (CEG). NEL Underserved Populations - Seasonal Flu. 2024.