



Immunisation Annual Report 2023/24

Public Health and Health Policy

Summary

This report provides a summary of progress of delivery of key immunisation programmes and examples of activity over the past year. Data tells us that we continue to see high overall uptake in our childhood immunisations programmes but we are starting to see declines across some vaccine programmes and declines in our adolescent vaccinations. Our adult Covid-19 and flu programme uptake shows a decrease in uptake compared to winter 2022-23, notably occupational groups such as social care workers. We also know there are significant inequalities in uptake and we continue to see threats from diseases, such as measles. We have worked with our Health and Social Care Partnerships and wider partners to understand this data and ensure evidence-based actions are taken forward locally.

Our goal is to ensure all immunisation programmes are delivered in a safe, effective, inclusive and person-centred way and are effectively working to increase uptake of vaccines and reduce inequalities in uptake. The evidence is overwhelming that immunisation programmes save lives and are an important part of preventing ill health. We encourage everyone who is invited to take up the offer of immunisation to accept it. More information on the vaccinations offered across Lothian are on our [website](#).

We hope this report highlights the continued importance of vaccination to ensure more people in Lothian are protected against vaccine-preventable diseases. We look forward to working with our partners in the year ahead to deliver quality immunisation programmes across population groups.

Public Health and Health Policy

The Public Health and Health Policy directorate consists of over 150 people working in 4 main divisions. We work to improve and protect the health of the people of Lothian.

Our underpinning principles for our work:

- Work in Partnership locally to reduce health inequalities and improve population health.
- Ensure that prevention is prioritised with a focus on strengthening communities.
- Ensure public health practice is evidence informed with resources and activity deployed proportionate to population need.
- Recognise the climate emergency as a public health priority and embed the UN Sustainable Development Goals/Scottish Climate Plan in public health activity.
- Nurture and support well-trained and motivated staff.
- Embed equality and human rights into our work, including trauma informed practice, The Promise and the UNCRC.
- Set and maintain a culture of continuous evidence-based improvement.

The Public Health Immunisation Team are part of the Health Care Public Health division of the directorate of Public Health and Health Policy. The Healthcare Public Health division work to maximise the population benefits of health care while reducing inequalities.

Introduction and context

As a public health measure, immunisation is the most cost-effective intervention for saving lives and improving the health of the population.

Immunisation programmes help protect the population against serious vaccine preventable illness, such as influenza, COVID-19, measles and pneumonia.

Across Edinburgh and the Lothians, all lifespan vaccinations e.g., routine childhood vaccines and all age-related seasonal programmes are delivered by NHS Lothian and the four local Health and Social Care Partnerships.

The Public Health Immunisation teamwork with Health and Social Care Partnerships, local authorities, community and voluntary sector organisations.

Our work to improve uptake and reduce inequalities is informed by evidence and engagement with our communities to listen to their views, needs and experiences.

Our work follows immunisation policy set by the Scottish Government Health Directorate who take advice from the UK Joint Committee on Vaccination and Immunisation.

Our work will also align to Public Health Scotland's new Vaccination and Immunisation Strategy (2024-2028).

This report outlines progress in the delivery of NHS Lothian immunisation programmes over the past year, providing data from 1 April 2023 to 31 March 2024.

Equalities and Human Rights

Who we support

NHS Lothian immunisation programmes includes all childhood, adolescent, and adult vaccines.

Selective immunisation programmes are also available to populations who are vulnerable to or at an increased risk of vaccine preventable disease. These include pregnant women, older people, prisoners, men who have sex with men and people in clinical risk groups.

Removing discrimination, advancing equality of opportunity and fostering good relations.

There is ongoing work through the Health and Social Care Partnerships, the Immunisation Oversight Board, Delivery Group and Children's Delivery Group on addressing inequalities in immunisation across all vaccination programmes and at all ages.

- We worked with **Minority Ethnic Health Inclusion Service (MEHIS)** prioritising three communities with poorer vaccination uptake: Polish, African and Asian. Community engagement work has helped determine and address barriers to accessing vaccination and MEHIS bilingual link workers worked with vaccination teams to support outreach and information sessions in religious and community settings.
- We worked with **Minority Ethnic Carers of People Project (MECOPP)** and their Community Health Worker to reach Gypsy Traveller communities through vaccination information and outreach.
- We are working to commission qualitative research with **pregnant women and parents/carers of 0–5-year-olds** in under-served communities to explore experiences, barriers and enablers to immunisations.

Future Plans 2024-25:

- Ongoing collaboration with MEHIS and MECOPP to hear the voices and experiences of minority ethnic communities and using these insights to develop solutions to overcome barriers.
- Ongoing vaccination information and outreach in faith and community settings to support access and reach into communities
- Equality and Children's Rights Impact Assessment of Respiratory Syncytial Virus (RSV) immunisation Programme

What we achieved this year

Improve uptake of childhood immunisation

The World Health Organisation (WHO) recommends that on a national basis at least 95% of children are immunised against diseases preventable by immunisation and targeted for elimination or control.

Children from more deprived areas are less likely to be vaccinated than children in less deprived areas. Work to explore uptake is underway in collaboration with 0-5 children's vaccination teams.

Our progress this year:

- Approximately 80,000 childhood immunisation appointments (excluding Flu) offered in a range of settings
- 2,175 children and young people booked appointments for the measles, mumps and rubella vaccine
- Over 800 children's immunisation histories were updated as part of the measles catch-up campaign during February/March 2024

- **Vaccines given at 12 months**

Lothian uptake of the 6-in-1 vaccine exceeds the WHO target (95.3%) and uptake of the Pneumococcal Conjugate (PCV) and Meningitis B (MenB) vaccines (94.6% and 93.7%) were close to the WHO target. Rotavirus uptake was slightly lower (92.1%) and Lothian is slightly below the national comparator.

Uptake by 12 months year ending 31 December 2023

Immunisation	Scotland	NHS Lothian	WHO target
6-in-1 primary course	95.0%	95.3%	95%
PCV primary course	95.2%	94.6%	95%
Rotavirus primary course	92.5%	92.1%	95%
MenB primary course	93.8%	93.7%	95%

Source: [Childhood immunisation statistics Scotland](#)

- **Vaccines given at 24 months**

Most children received their booster vaccines: Measles, Mumps and Rubella (MMR1) (94.1%), Hib/Meningitis C (93.5%), PCV Booster (93.6%) and MenB (92.8%), and we are above the Scottish national average, but uptake remains below the WHO target.

Uptake by 24 months year ending 31 December 2023

Immunisation	Scotland	NHS Lothian	WHO target
MMR1 (first dose of MMR)	93.0%	94.1%	95%
Hib/MenC	93.0%	93.5%	95%
PCV Booster	92.9%	93.6%	95%
MenB Booster	92.8%	92.8%	95%

Source: [Childhood immunisation statistics Scotland](#)

- **Vaccines given at 5 years.**

Uptake of the 4-in-1 booster vaccine (diphtheria, tetanus, whooping cough, polio) is 90.2% and uptake for second dose of MMR is 89.7%. Lothian remain above the Scottish national average, but uptake remains below the WHO 95% target.

Uptake by 5 years year ending 31 December 2023

Immunisation	Scotland	NHS Lothian	WHO target
4-in-1 (Booster)	89.6%	90.2%	95%
MMR2 (second dose of MMR)	89.1%	89.7%	95%

Source: [Childhood immunisation statistics Scotland](#)

There is an increasing threat of [measles](#) outbreaks. Public Health Scotland issued an alert in January 2024 about the rising number of cases in England and Europe. NHS Lothian and Health and Social Care Partnership vaccination teams are currently undertaking a catch-up campaign for children and young people with missed MMR vaccines.

Future Plans 2024-25:

The Joint Committee on Vaccination and Immunisation has recommended changes to the routine infant schedule that are expected at the end of 2025. During 2024/25 we will work through what this will mean for local delivery. Changes include:

- the introduction of a universal varicella (chicken pox) programme using a combined MMRV (measles, mumps, rubella and varicella) vaccine
- an additional dose of Hib-containing multivalent vaccine to be given at 18 months
- the second dose of Measles, Mumps & Rubella (MMR) vaccine to be brought forward from 3 years 4 months to 18 months
- a dose of meningococcal C containing vaccine is no longer recommended at 12 months. This is due to the success of the adolescent MenACWY programme in controlling meningococcal C disease across the population

Improve uptake rates of adolescent immunisation

The adolescent programme includes Human papillomavirus (HPV) programme for S1 pupils and for S3 pupils the DTP vaccine (diphtheria, tetanus and polio) and Meningitis ACWY (MenACWY) vaccine which protect against meningitis associated complications such as septicaemia (blood poisoning).

Our progress this year:

- **Vaccines given at S1 (with catch ups in later years)**

Coverage of HPV for S1 pupils at the end of the last academic year 2022/23 was 68.1%, this is a slight decrease from 2021/2022 (69.5%) and we are just below the national average (72.9%).

HPV Vaccination Coverage Data period: 1 August to 31 July 2023

Immunisation	Scotland	NHS Lothian
% coverage for both sexes in S1	72.9%	68.1%
% coverage for both sexes in S2	79.5%	75.7%
% coverage for both sexes in S3	85.2%	83.3%
% coverage for both sexes in S4	87.9%	80.7%

Source: [HPV immunisation statistics Scotland](#)

- **Vaccines given at S3 (with catch ups in later years)**

Coverage of Teen Booster vaccine (DTP) for S3 pupils was 66.6% (66.2% in 2021/22), and Meningococcal vaccine was 67.1% (66.4% in 2021/22) reflecting slight increases.

Teenage Booster (DPT) and Meningococcal (MenACWY) Vaccination Coverage

Data period: 1 August to 31 July 2023

Immunisation	Scotland	NHS Lothian
% coverage – S3 – DTP	68.6%	66.6%
% coverage – S3 MenACWY	68.7%	67.1%
% Coverage – S4 – DTP	77.3%	73.0%
% coverage – S4 MenACWY	77.4%	73.2%

Source: [Teenage booster immunisation statistics Scotland](#)

Future Plans 2024-25

- MMR vaccination offer to S1-S3 pupils in the school setting from June 2024
- S4-S6 students will continue to be offered MMR vaccination in community clinics over summer holidays.
- Close work with University of Edinburgh to research the effectiveness of school engagement sessions prior to vaccines being delivered in schools.
- School teams liaising closely with parents/carers to support consent form return

Improve uptake of Spring COVID-19 booster

On 7 March 2023, the Joint Committee on vaccination and Immunisation recommended a spring booster dose of Covid-19 for:

- Adults aged 75 years and over including those who are Housebound
- Residents in a care home for older adults
- Individuals aged 5 to 74 years with a weakened immune system

Our progress this year:

- Lothian Health and Social Care Partnership teams delivered COVID-19 vaccinations in care homes and for those that are housebound from 27 March 2023 to 30 June 2023. Lothian uptake rates for the spring campaign were comparable to national uptake rates and slightly higher in Lothian for those aged over 75 years.

Vaccination uptake of Spring Booster 2023

Cohort	Scotland	Lothian
Older Adult Care Home Residents	90.6%	90.5%
Adults Aged 75 Years and Over	82.5%	84.6%
5 to 74 years with a weakened Immune System	58.4%	58.3%

Source: <https://www.opendata.nhs.scot/dataset/flu-covid-vaccinations>

Future Plans 2024-25

The Joint Committee on Vaccinations and Immunisations published recommendations for COVID-19 spring 2024 vaccination booster on 7 February 2024. Those eligible for vaccination are

- adults aged 75 years and over,
- residents in a care home for older adults,
- individuals aged 6 months and over who have a weakened immune system.

The [spring booster campaign](#) will run from 2 April to 30 June 2024.

Improve uptake of Flu and COVID-19 Autumn/Winter vaccination

The flu vaccination campaign started on 4 September 2023 with flu and COVID-19 vaccination co-administration appointments available from mid-September.

The Joint Committee on Vaccination and Immunisation advised for winter 2023-24 the following groups should be offered **both COVID-19 and flu vaccination**:

- Residents and staff in care homes for older adults
- Those aged 65 years and over
- Those aged 6 months to 64 years in a clinical risk group
- Frontline health and social care workers (HSCWs)
- Those aged 12 to 64 years who are household contacts of those with a weakened immune system.
- Those aged 16 to 64 years who are carers
- Pregnant women

In addition, people in the following groups should be offered **flu vaccination only**:

- Those aged 50-64 years without an underlying clinical at-risk condition.
- Those aged 18-64 years with an eligible flu-only clinical risk condition
- Young carers under the age of 16 years
- Non frontline NHS workers
- Nursery, primary and secondary school teachers and pupil facing support staff.
- Prison population, prison officers and prison support staff who deliver direct services.
- School age pupils (primary and secondary)
- Children aged 2-5 (not at school)
- Children aged 6 months to 2 years at-risk.

As in previous years, NHS Lothian offered flu vaccination to all employees.

Our progress this year:

- All eligible citizens could 'drop-in' for winter vaccination from 11 November 2023
- Lothian exceeded the national COVID-19 uptake comparator for cohorts with the exception of weakened immune system and at risk 12 – 64 years cohorts which were marginally less. Uptake for the winter flu vaccination is below pre-pandemic uptake.
- We carried out patient feedback surveys to understand reasons and barriers to non-attendance which will inform future programme planning.
- We held a winter vaccination campaign debrief event 1 March 2023 attended by teams supporting delivery of the winter vaccination campaign. Topics for discussion included - Care Home Vaccination, Quality and Safety, Children's Programme, Access/Inclusivity, Staff Vaccination, Maternity, Enquiries and Communication.

- **Vaccines for COVID-19**

There was no national target set for uptake of Covid-19 but a national aspiration of 75% uptake. This was not achieved in any health board in Scotland.

COVID-19 Winter 2023/2024 uptake

Cohort	Scotland	NHS Lothian
Overall uptake	56.6%	56.7%
Older adults in care homes	85.6%	87.6%
75+	84.0%	86.4%
65 – 74 years	74.3%	75.2%
Frontline healthcare workers	31.9%	39.9%
Weakened Immune System	60.8%	59.4%
At Risk 12 – 64 years	35.1%	34.8%
At Risk 5 – 11 years	6.9%	7.4%
At Risk 6 months – 4 years	5.1%	7.1%
Social Care Workers	12.8%	13.3%

Source: Discovery performance uptake report 7 April 2024

- **Vaccines for Flu**

There was no national target set for uptake but a national aspiration of 65% for flu. This was not achieved but Lothian exceeded the national rates for all cohorts.

Adult flu Winter 2023/2024 uptake

Cohort	Scotland	NHS Lothian
Overall uptake	53.7%	54.3%
Older adults in care homes	86.3%	88.5%
75+ years	84.6%	86.8%
65 – 74 years	75.2%	75.9%
50 – 64 years	35.0%	37.0%
Weakened Immune System	64.1%	65.4%
At Risk 18 – 64 years	40.7%	41.5%
All Healthcare Workers	30.5%	37.5%
All Social Care Workers	11.0%	12.0%

Source: Discovery performance uptake report 7 April 2024

Future Plans 2024-25:

- The Joint Committee on Vaccination and Immunisation recommendations for Winter 2024-25 COVID-19 vaccination is due imminently and these recommendations will be worked through at a local level. Recommendations for Flu have been published.
- Collaboration with Public Health Scotland, to ensure communications are shared timely with partners.
- Implement recommendations from the National Health & Social Care Worker Survey to help improve uptake rates among our health and social care workers.

Improve uptake of Pneumococcal and Shingles Vaccination

From 1 September 2023, these groups became eligible for a [shingles](#) vaccination in Scotland:

- People aged 50 or over, about to start immunosuppressive therapy.
- People aged 50 or over, with a severely weakened immune system.
- People aged 71 - 79 who have not previously been vaccinated.
- People aged 18 or over who have received a stem cell transplant.
- People aged 18 or over who have had CAR-T therapy (type of cancer treatment)
- People who were aged 65 or 70 on 1 September 2023.

People are eligible for a single [pneumococcal](#) vaccine if they are aged:

- 65 years old or over
- 64 years old or younger with certain health conditions

Repeat immunisation is recommended every 5 years for people with asplenia, splenic dysfunction or chronic renal disease. People eligible for these vaccinations were invited to attend for shingles vaccination from September 2022 to August 2023 and for pneumococcal from April 2023 to March 2024. There was a pause in the programme delivery from September to December 2023 to focus on delivery of flu and COVID-19 vaccinations.

Invites for pneumococcal and shingles vaccinations re-commenced from 8 January 2024 following the peak activity associated with the winter vaccination campaign from September to December 2023. From January 2024, there was a change to the recommended shingles vaccination to be administered - all citizens should receive 2 shingles vaccine doses resulting in a requirement for additional appointment capacity. This programme will be on-going throughout 2024-25.

Our progress this year:

- **Pneumococcal and Shingles uptake up to 30 September 2023**

Appointment Method	Scotland Uptake	NHS Lothian Uptake
Pneumococcal 65+	77.7%	84.6%
Pneumococcal 2-64 years	50.2%	63.6%
Shingles 70-79 year olds*	75.6%	83.1%

*up to 31 August 2023 Source: [PHS vaccination surveillance dashboard](#)

Future Plans 2024-25:

- Pneumococcal and shingles vaccinations will recommence in January 2025

Community Pharmacy Support for the Winter Campaign

Community pharmacies have continued to play a significant public health role in supporting the COVID-19 and Flu winter programme by helping to increase vaccination uptake and accessibility, especially for older people.

The focus of Community Pharmacy support for Winter 2023/24 was citizens aged 75 years and over, however some individuals under 75 years were able to book appointments in pharmacies via the national online appointment booking portal.

Across Lothian, pharmacies that provided vaccination clinics in winter 2023/24 were selected based on agreed criteria and collaboration between NHS Lothian Community Pharmacy Development Team, Health & Social Care Partnerships and Community Pharmacy Lothian.

Our progress this year:

- **2 Health and Social Care Partnerships** worked with their Community Pharmacies.
- **18 pharmacies took part** for 5-weeks from 25 September – 17 November 2023.
- **3,187** Covid booster appointments were made in a Community Pharmacy.
- **3,213** flu vaccine appointments were made in a Community Pharmacy.

Future Plans 2024-25:

- The delivery models will continue to be reviewed in relation to support the winter programme.

Mpox Vaccination Programme

Mpox (formerly known as Monkey pox) is a viral zoonotic disease caused by Mpox virus)

The Mpox vaccine is recommended for people whose sexual networks mean they are more likely to come into contact with mpox. A full course of 2 doses of vaccine given at least 28 days apart is recommended for those at risk of mpox exposure. The vaccine is also offered 'post exposure', if someone has had significant contact with someone with mpox, such as healthcare workers in high-risk settings, who are caring for someone with confirmed mpox.

Our progress this year:

- As of 16 January 2024, NHS Lothian administered **2220 first doses and 1694 second doses** as part of the pre-exposure programme.
- NHS Lothian have established a post exposure pathway and citizens have been treated successfully through this pathway.

Future Plans 2024-25:

- Mpox programme will continue to be offered to at risk citizens delivered by sexual health services across Lothian

Respiratory syncytial virus vaccine (RSV)

Lothian attends the Public Health Scotland RSV vaccination project board. Plans remained unconfirmed from the Joint Committee on Vaccination and Immunisation but planning assumptions are to deliver RSV from August 2024 to those 75 years of age and protection of infants either through vaccination of women in pregnancy or infants in the early post-natal period. Scottish Government are beginning communications with midwifery partners and local links are being established for planning purposes.

Future Plans 2024-25:

- Delivery of RSV vaccination programme in line with Joint Committee on Vaccination and Immunisation advice