

2024 Annual Director of
Public Health Report for Wandsworth

Moving the Mountain

Navigating Challenges in
Childhood Vaccination



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Abbreviations

ADPHR	Annual Director of Public Health Report
COVER	Cover of Vaccination Evaluated Rapidly
DPH	Director of Public Health
DNA	Did Not Attend
GP	General Practice
HRCH	Hounslow and Richmond Community Healthcare
HPV	Human papillomavirus
ICB	Integrated Care Board
MECC	Making Every Contact Count
MMR	Measles, Mumps and Rubella
NHS	National Health Service
NHSE	National Health Service England
OHID	Office for Health Improvement and Disparities
PHE	Public Health England
QOF	Quality Outcomes Framework
RSPH	Royal Society for Public Health
SAIS	School Aged Immunisation Service
SWL	South West London
UK	United Kingdom
UKHSA	United Kingdom Health Security Agency
US	United States
VPD	Vaccine preventable disease
WHO	World Health Organisation

Our use of language

VACCINE

A vaccine is a type of medicine that trains the body's immune system so that it can fight a disease that it has not come into contact with before. Vaccines are designed to prevent disease, rather than treat disease once you have caught it. ⁽⁸⁾

The Oxford Vaccine Knowledge Project have created [a short animation that explains how vaccines work](#).

VACCINATION

Vaccination is the process of receiving a vaccine – for example, having an injection or taking an oral vaccine dose. ⁽⁹⁾

IMMUNISATION

The process of becoming immune to a disease following vaccination or infection. ⁽¹⁰⁾

VACCINE PREVENTABLE DISEASES (VPDS)

Infectious diseases caused by viruses or bacteria that can be prevented with vaccines. ⁽¹¹⁾

VACCINE COVERAGE

The proportion of individuals that have received a specified vaccination in the eligible population, for example children aged 5 years in Wandsworth. ⁽¹²⁾

VACCINE UPTAKE

The number of individuals vaccinated with a certain dose of a vaccine within a specific time period, for example, during a month or year. ⁽¹³⁾ Uptake can be expressed as a proportion of the target population.

VACCINE PROTECTION

Vaccines offer strong protection against vaccine preventable diseases, but this protection takes time to build. Some vaccines require an individual to receive more than one dose. An individual that has received only dose of a multi-dose vaccine will be **partially protected**. An individual that has received all required vaccine doses will be **fully protected**. ⁽¹⁴⁾

VACCINE HESITANCY

The WHO defines vaccine hesitancy as a “delay in acceptance or refusal of safe vaccines despite availability of vaccine services”. ⁽¹⁵⁾ It is caused by complex, context specific factors that vary across time, place, and different vaccines, and is influenced by issues such as complacency, convenience, confidence and socio-demographic concepts. ⁽¹⁵⁾ In 2019, it was named as one of the top ten threats to global health by the WHO. ⁽¹⁶⁾

Foreword



Although immunisation is one of the most successful public health interventions, the decline of immunisations in the pre-pandemic (COVID-19) decade is an issue of global concern with the WHO referring to the 'zero-dose children' who number in their millions globally.

This effect is replicated across London and in Wandsworth, with several thousands of unvaccinated children and young people who remain unprotected from preventable diseases, a challenge we refer to as 'the mountain.' Over the last decade, the uptake of several childhood vaccinations has either remained below the national average, or below the targets needed to protect those who are not vaccinated.

Late last year, the UK Health Security Agency (UKHSA) announced that unless measles, mumps and rubella (MMR) vaccination rates improve, London could see a measles outbreak with tens of thousands of cases. The potential for local outbreaks is real because the 5-year incidence rate of measles has risen and remained above the national average while vaccination rates have remained below the national average. Wandsworth has previously experienced a significant measles outbreak between 2019-2020 and efforts to improve vaccine uptake have continued.

This report focuses on two childhood vaccination programmes to lift the lid on the issues to guide the local vaccination delivery system to improve uptake and protect communities.

Vaccines save lives and promote good health and well-being, by preventing disease and disability.

Shannon Katiyo

Director of Public Health



I am pleased to receive and support our Director of Public Health's Annual Report for 2023-24 focused on the issues of childhood immunisations currently affecting all London Boroughs including Wandsworth.

All children in Wandsworth deserve the best start in life and the opportunity to fulfil their full potential. This year's Annual Director of Public Health Report highlights the missed opportunity, with an increasing number of children not receiving their routine childhood immunisations. Without vaccination, they are at an increasing risk of preventable but potentially serious illnesses.

Low vaccination uptake is an inequality issue and national reports have shown a vaccination gap between children living in the most deprived areas when compared to those in the least deprived areas. Promoting vaccination uptake will enable all our children to have the best start in life.

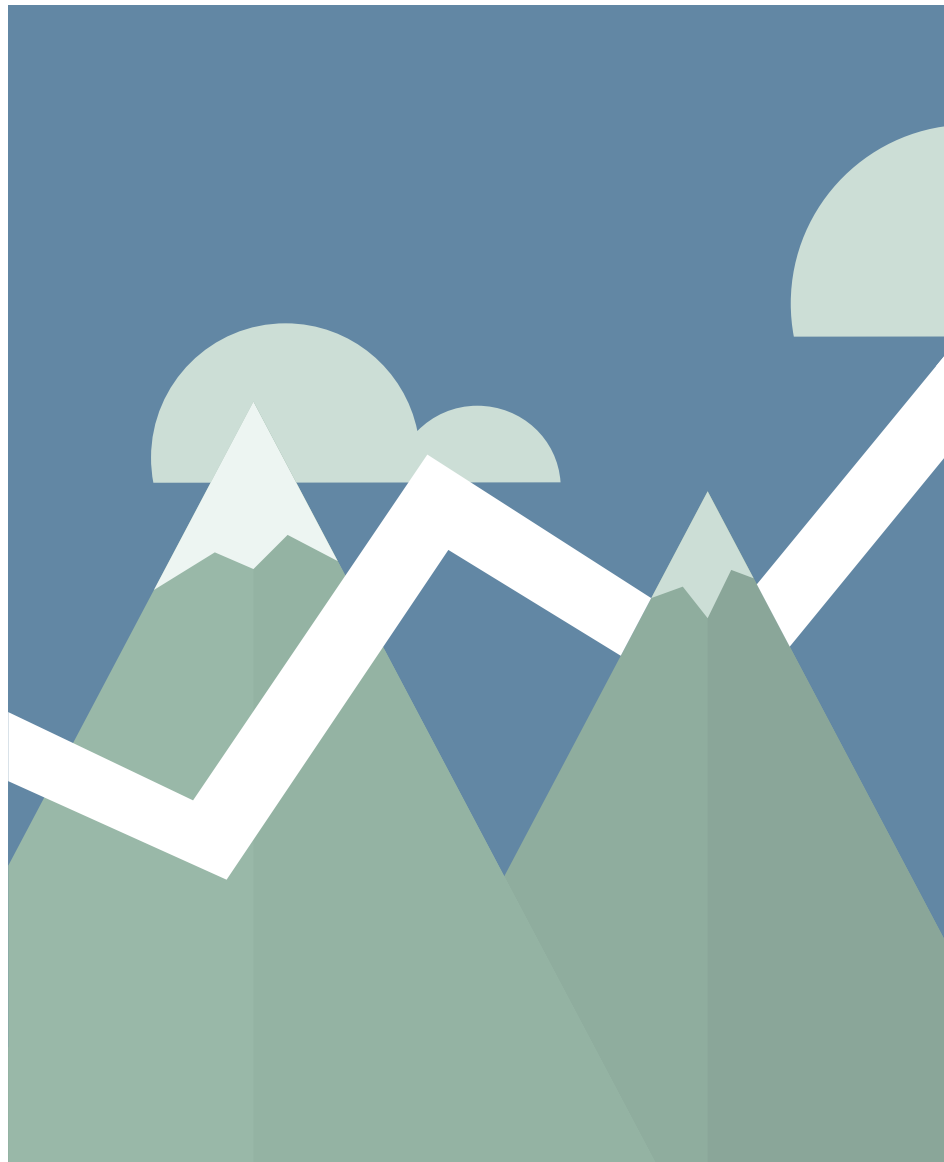
Encouraging vaccine uptake is challenging and I am delighted that this report engaged with residents including local parents and young people, to hear their voice, as well as GPs and wider health partners who are responsible for delivering vaccines. Only through listening to our communities and those delivering our local vaccination programmes can we understand the barriers and enablers to uptake and to take action to improve vaccination rates.

My profound thanks to the Wandsworth Public Health team for this timely report and to the residents and health partners who shared invaluable insights and experiences to help understand the issues.

Councillor Graeme Henderson

Cabinet Member for Health and Chair of the Wandsworth Health and Wellbeing Board

Executive summary



After clean water, vaccination is the most effective public health intervention in the world for saving lives and promoting good health. It is the safest and the most cost-effective way to protect individuals and communities from preventable diseases that can cause significant illness or death. Yet the rates of some childhood vaccinations in Wandsworth are falling, leaving increasing numbers of children at risk of catching vaccine preventable diseases and potentially developing severe illness, long-term disability and death.

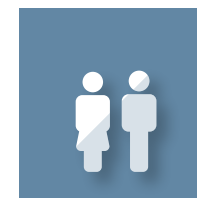
This report aims to understand the reasons for the decline in childhood vaccine uptake in Wandsworth, the potential impact of this on the health of children and finding solutions to help improve uptake. It focusses on two childhood vaccination programmes the Measles, Mumps and Rubella (MMR) and the Human Papilloma Virus (HPV) vaccines. These vaccines were chosen due to the complex challenges they present, and to help provide distinct insights to help inform future actions.

Our understanding of the local challenge was informed through a comprehensive engagement with people that are directly involved in the childhood vaccination programme. Understanding these views and experiences is vital to guide how the system works to improve the delivery of vaccination in Wandsworth.

We heard from...



322
parents



24
young people



28
GP staff



12
vaccine delivery
partners

SECTION ONE What is the mountain: Childhood vaccinations in Wandsworth

Section one describes the challenge with childhood vaccinations in Wandsworth. Target rates of vaccination are currently not being achieved for either the MMR or the HPV vaccination programmes. Since 2010/11, the proportion of children aged five that completed their full course of MMR vaccinations has declined each year. In 2022/23 only three-in-four five-year-olds were fully vaccinated. Similarly, the proportion of young people that completed the full course of HPV vaccination over the past two years was between 10 and 20 percentage points below the target rates.

Declining vaccination rates are leaving increasing numbers of children susceptible to infectious diseases. In Wandsworth, it is estimated that approximately -

One in five children born between April 2008 and March 2018 are unprotected or insufficiently protected against MMR.



One in eight girls born between September 2003 and August 2009 may not have received HPV vaccination.



One in three boys born between September 2006 and August 2009 may not have received HPV vaccination.



Declining vaccination rates can have significant impacts at different levels. At an individual level, infectious diseases can make unvaccinated individuals severely unwell and may lead to serious complications. Infectious diseases can also increase pressure on the wider health and care system. An outbreak of an infectious disease runs the risk of overwhelming services beyond health, for example disrupting education and early years settings and impacting the local economy.

SECTION TWO Why we haven't moved the mountain yet: Challenges to achieving target vaccination coverage

There are many reasons why target vaccination coverage is not being achieved in Wandsworth currently, and why some groups of parents may struggle more than others to bring their child forward for vaccination. Many of these reasons are not unique to Wandsworth but are also experienced at regional and national levels.

1. Inequalities in childhood vaccinations

Receiving childhood vaccinations is vital to protect children from disease and promote good health from infancy. From the outset the journey to vaccination is not equal. Some groups of children are less likely than others to receive vaccination. This includes children that have recently migrated, Traveller and Roma communities, children from Black Caribbean and Black African ethnic groups, and children from large families.

2. Vaccine hesitancy and refusal

Vaccine hesitancy is regarded by the World Health Organisation as one of the top ten threats to global health. ⁽⁴⁹⁾ Parents may be hesitant or refuse to vaccinate their children due to a lack of confidence in vaccines, complacency and/or inconvenience. ⁽⁵²⁾

3. Availability, accessibility, and convenience of vaccine appointments

National studies have shown that the availability, accessibility, and convenience of vaccination appointments is an important factor in determining uptake, especially for parents who are not explicitly anti-vaccination but may be hesitant. ^(54,82)

4. Capacity, resources, and incentives to improve vaccine uptake

Alongside vaccine delivery, most local GP practices carry out work to improve vaccination rates. However, this work can be limited by the availability, capacity, training and incentivisation of GPs to deliver it.

5. Engaging schools to support the childhood vaccination programme

Schools play a pivotal role in supporting the delivery of the school-aged vaccination programme, and their level of engagement can strongly influence the number of pupils that take up the vaccination offer.

6. The impact of the COVID-19 pandemic

The COVID-19 pandemic brought unforeseen disruption to childhood vaccination programmes. Whilst the pandemic directly impacted the delivery and uptake of some vaccination programmes, it also had indirect and enduring impacts on public attitudes to vaccinations.

7. Accuracy of vaccine data records

Studies and local investigations have shown that there are data inaccuracies within NHS vaccination records, which prevents an accurate understanding of the unvaccinated population in our borough.

SECTION THREE How we will move the mountain:
Solutions to improve vaccination coverage

Across our engagement, vaccine delivery partners, local parents and young people proposed various ways to improve childhood vaccination rates in Wandsworth. These included:

1. Encouraging and empowering parents to make informed decisions about vaccination

The vaccination system must ensure that parents are equipped and well informed to make decisions about vaccination in the best interest of their child. This can be done through communication campaigns, provision of information and resources, and having one-to-one conversations.

2. Enhancing the vaccine delivery system capacity to improve uptake

Whilst most GP surgeries in the borough are carrying out work to improve uptake in the borough, additional actions could be taken to further enhance uptake improvement. For example staff in primary care and community pharmacies could be upskilled to have vaccine conversations.

3. Improving the quality of local vaccination data

Whilst local work is being carried out to improve the quality of vaccination data in GP records, partners proposed the need for bigger, system level improvements, for example the development of a central data source.

4. Collaboration across the vaccine delivery system

The vaccination delivery system is complex and involves multiple partners working collectively to plan and deliver vaccinations. Partnership working was highlighted as a success in the borough, but there are aspects of the system that may require additional strengthening,

It is noted that actions to improve childhood vaccination rates cannot solely be advanced by the local vaccine delivery system. Improving childhood vaccination rates is a challenge that requires a collaborative approach with partners, parents/caregivers, and children themselves at all levels.

The report concludes by proposing ten local recommendations for change.
See page 66



Moving the mountain

“The two public health interventions that have had the greatest impact on the world’s health are clean water and vaccines.” WHO ⁽¹⁾

After clean water, vaccination is the most effective public health intervention in the world for saving lives and promoting good health. It is the safest and most cost-effective way to protect individuals and communities from preventable diseases that can cause significant morbidity and mortality. Yet the rates of childhood vaccination in Wandsworth are declining, leaving increasing numbers of children susceptible to catching vaccine preventable diseases (VPDs) and potentially developing severe illness, long-term disability and death. Although work to improve uptake of childhood vaccinations in Wandsworth has been underway for many years, the mountain has only grown taller as more and more children have not received routine childhood vaccinations.

But this mountain must be moved. Vaccines are the most important weapon in our arsenal against VPDs. Since vaccines were introduced in the UK, diseases like smallpox, polio and tetanus that used to kill or disable millions of people are either gone or are now very rarely seen. Other diseases have reduced to very low levels. Public Health England ⁽¹⁾ (PHE) estimate that since the measles vaccine was introduced in 1967, 20 million cases of measles and 4,500 deaths have been averted in the UK. ⁽²⁾ Unless sufficient numbers of the population are vaccinated, preventable diseases can quickly spread again, jeopardising the ability of the local population to live a long and healthy life. Protection against preventable diseases is not something that we can afford to lose.



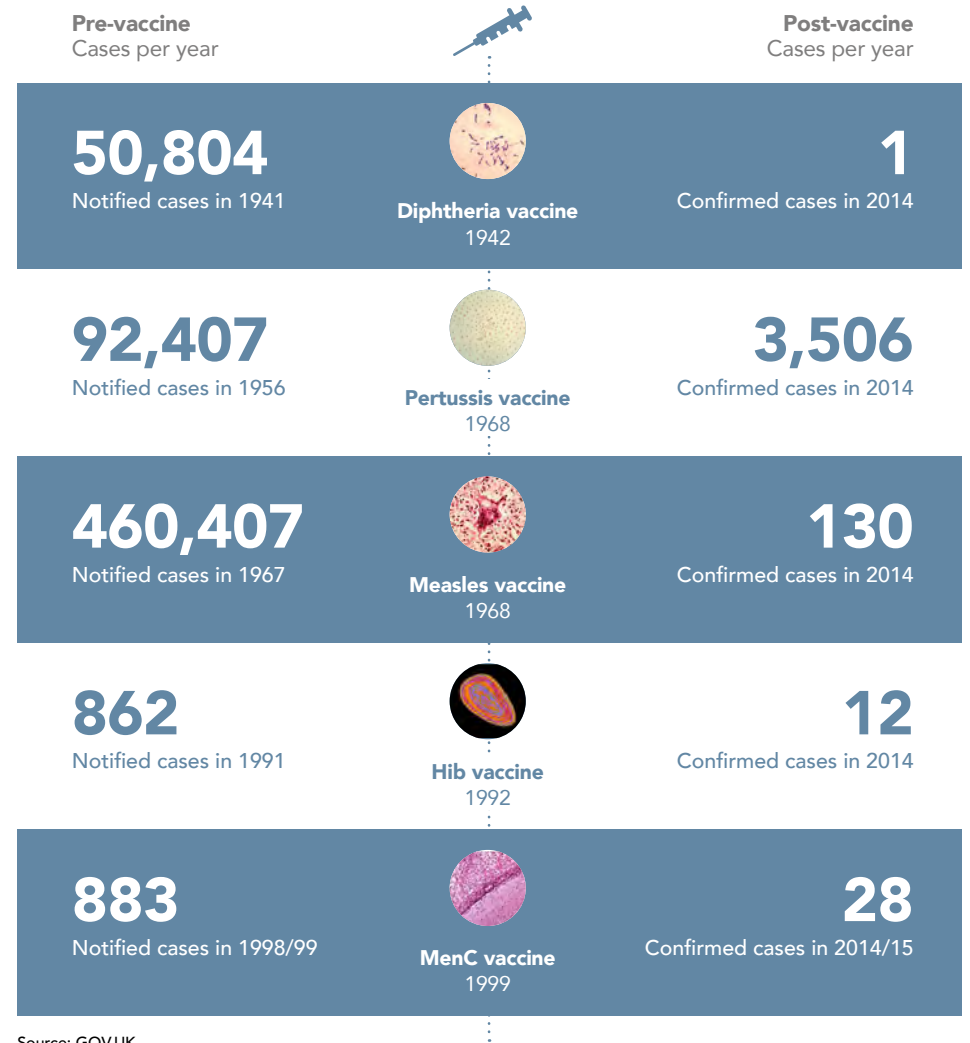
¹ Public Health England (PHE) was replaced by the UK Health Security Agency (UKHSA) and the Office for Health Improvement and Disparities (OHID) in April 2021.



This report calls to attention the local picture of childhood vaccinations in Wandsworth and identifies the factors that prevent the borough from achieving higher vaccination rates. It features the stories of local parents and vaccine delivery partners, as well as case studies of local work that is already underway to improve vaccination rates. The report concludes with a series of local recommendations of how partners can work collectively to move the mountain and protect children in Wandsworth.

“These are historic challenges. And it just seems to me that they are mountains that nobody could move for whatever reason.”

Vaccine Delivery Partner ⁽³⁾



Source: GOV.UK

Routine childhood immunisation schedule

In the UK, vaccinations are offered throughout the life course and are delivered through a combination of general practice (GP) led services, school health services and other providers such as community pharmacy. See **Appendix** for an overview of the local vaccine delivery system.

Most vaccinations in the UK are given during childhood. The **routine immunisation schedule** is designed to ensure that children are protected from as early as possible from serious diseases, as well as ensuring that those in the community who cannot be vaccinated are protected. Some vaccinations have been combined to reduce the number of injections that a child needs to receive such as the 6-in-1 (covering diphtheria, hepatitis B, Hib (Haemophilus influenzae type b), polio, tetanus, whooping cough) and the measles, mumps and rubella (MMR) vaccines. Some vaccines will require multiple doses, or a booster, for maximum effectiveness. Selective vaccination programmes are also offered to targeted children who are at a higher risk of hepatitis B and tuberculosis.

Protecting the Community

Vaccination not only protects the individual that receives it from contracting a VPD. High uptake of a vaccine within a population will create herd immunity - an indirect form of protection that occurs when a large percentage of the population has become immune, preventing the spread of infection. This is important to protect those in the population that may not be able to receive vaccinations, as well as to support efforts to eradicate diseases.

To prevent onward transmission of infections and increase the probability of achieving herd immunity, the WHO recommends that, nationally, at least 95% of children receive routine childhood vaccinations and at least 90% of teenagers receive the HPV vaccine. ⁽⁴⁾

The global decline in vaccine uptake

“We are witnessing the largest sustained drop in childhood immunisation in a generation. The consequences will be measured in lives.”

World Health Organisation (WHO), 2022 ⁽⁵⁾

Vaccines are one of the most significant scientific advances of our time. Yet the uptake of childhood vaccinations is declining, and this is a trend that has been noted at local, regional, national, and international levels. ⁽⁵⁾ Many routine childhood vaccination programmes in England no longer achieve the 95% coverage target set by the WHO to achieve and maintain elimination. ⁽⁶⁾ In 2022, the number of children that received an MMR vaccine in the UK fell to the lowest level it has ever been in the past 10 years. ⁽⁷⁾

The WHO named “Vaccine Hesitancy” as one of the top ten threats to global health in 2019

There is a real risk that this decline in vaccine uptake will undermine our past achievements to eliminate diseases. Lack of vaccination is making increasing numbers of children susceptible to catching preventable diseases, putting them at risk of developing severe illness, disability and even death. Outbreaks of preventable and serious diseases are becoming increasingly common, particularly in London where vaccination rates are the lowest. Outbreaks are also increasingly globally, as cases rapidly spread internationally through the travel of under-vaccinated people to measles endemic countries.

Our approach

This report aims to understand the decline in vaccine uptake in Wandsworth, and the potential impact of this on the health of local children. It investigates the reasons why uptake is declining and proposes solutions to achieve the WHO's target levels.

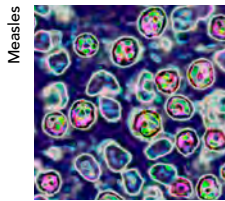
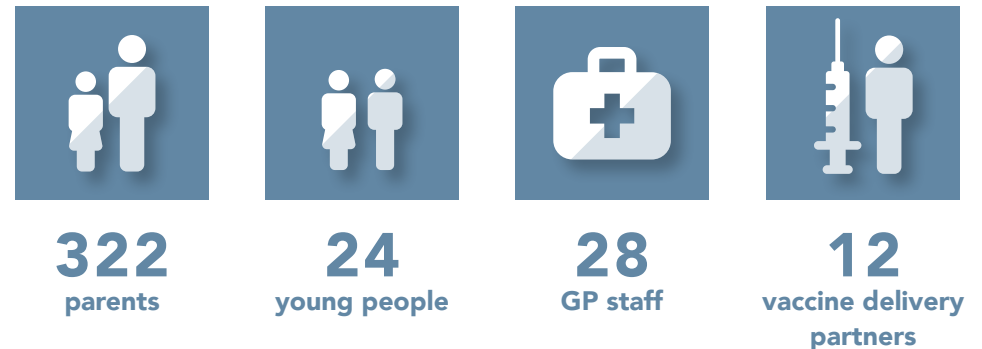
To understand the local challenge, this report will investigate two vaccination programmes – MMR and HPV. Spanning early childhood to school-aged delivery, these vaccines have been selected to illustrate the challenges to improving uptake across the routine child immunisation schedule. Together, these vaccines provide distinct insights into the challenge of improving uptake and highlight the complexity of the task ahead.



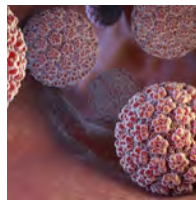
The local story is told by people directly involved in the childhood vaccination programme. Through comprehensive engagement with residents and vaccine delivery partners, via surveys, focus groups and interviews, we have captured a diversity of perspectives about vaccination in the borough. We heard from parents and young people, who are making the decisions about receiving vaccines. We also heard from partners working to deliver the local programme, including the GPs and the service providers.

We are grateful to everyone who gave their time and consent to share their views and experiences in this report. Understanding the breadth of views and experiences is vital to guide how the local system works to improve the delivery of vaccination to local communities. Their voices, perspectives, and experiences enrich this report.

We heard from...



MMR



HPV

Age of eligibility	12 months and 18 months	13 to 14 years
Decision to vaccinate	Parent	Parent and child
WHO Coverage Target	95%	90%
Latest coverage	75.2% fully vaccinated (2022/23)	70.6% girls and 69.7% boys fully vaccinated (2021/22)
Protects against	Measles, Mumps and Rubella	Human papillomavirus infection
VPD risk	Acute infection	Lifelong infection
Negative social narrative	Wakefield Scandal – linked to Autism	Sexual promiscuity

This report is divided into three sections

SECTION ONE



What is the mountain

Childhood vaccinations in Wandsworth

SECTION TWO



Why we haven't moved the mountain yet

Challenges to achieving target vaccination coverage

SECTION THREE



How we will move the mountain

Solutions to improve vaccination coverage

SECTION ONE

What is the mountain: childhood vaccinations in Wandsworth

The journey to move the mountain in Wandsworth must start by understanding the challenge.

Section one describes the challenge in Wandsworth through two childhood vaccination programmes – the MMR and HPV. These vaccinations have been selected to illustrate the challenges to improving uptake across a child's life-course, from infancy to adolescence. The section opens with an introduction to each vaccination programme, highlighting the importance in protecting the population's health and the risks that are faced if target levels of uptake are not achieved. It proceeds with an outline of the child population, presents local MMR and HPV vaccination rates and closes with an estimation of the number of children that may not have received vaccination. Recognising the scale of this population is crucial to truly understand the challenge faced and to determine solutions that will protect the health of residents.

“ In my experience, it only takes maybe one case to get the ball rolling. And particularly if you have a borough where the immunisation' rates are not great... that impact [will] be a bit quicker than expected. ”

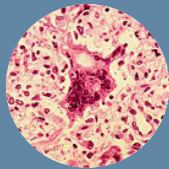
Vaccine Delivery Partner ⁽³⁾

SECTION ONE

Measles, Mumps and Rubella (MMR) vaccine

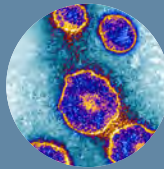
The MMR vaccine offers protection against measles, mumps, and rubella diseases. The vaccine is provided through two injections, which are administered when a child is one year of age and 18 months of age. ⁽¹⁷⁾ The age at which the second dose is provided was brought forward in Wandsworth in response to previous measles outbreaks. Studies have shown that earlier vaccination with the second dose of MMR is associated with significantly higher vaccine coverage at 5 years of age. ^{(18) (19,20,21)}

MEASLES



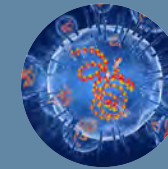
Measles is a very infectious viral illness that is spread through coughs and sneezes. Measles can lead to serious complications, particularly in immunosuppressed individuals and young infants. This may include a chest and ear infection, fits, diarrhoea, encephalitis (infection of the brain) and brain damage. For some, it can be fatal. ⁽¹⁹⁾

MUMPS



Mumps is a viral illness that is spread by coughs and sneezes. The most common symptom is swelling of the glands at the side of the face, but complications of mumps can be very painful and may include inflammation of the ovaries or testicles, as well as viral meningitis and encephalitis (infection of the brain). ⁽²⁰⁾

RUBELLA



Rubella, also known as German Measles, is a viral illness that is spread by coughs and sneezes. For most people it is a mild condition. However, if a pregnant woman develops rubella, it can lead to very serious complications for their unborn baby, including cataracts, deafness, heart problems or brain damage. ⁽²¹⁾

One parent interviewed for this report told us about their own experiences of measles as a child -

“ I had measles as a child, as did one of my brothers, or both of brothers actually... [and a] former classmate of mine when I was studying. She was actually partially deaf as a result of a measles infection... It's looking at what is the potential side effects versus what is the impact of getting the disease. And the impact of getting the disease would potentially be a hell of a lot worse.” ⁽⁷⁸⁾

SECTION ONE

What are the risks of low MMR vaccine coverage?

Falling rates of MMR vaccination are leaving children in London susceptible to measles, mumps, and rubella infections. In 2023, there were 368 confirmed cases of measles in England, 33% of which were reported in London. ⁽²³⁾ This is a large increase from the 54 confirmed cases reported in the whole of 2022. ⁽¹⁶⁾

This steady rise in measles cases has led the UKHSA to assess that, unless vaccination rates improve in London, there is a risk that a measles outbreak of between 40,000 and 160,000 cases could occur in the capital. UKHSA assessed that susceptibility is particularly high among 19 to 25-year-olds – the ‘Wakefield cohorts’ who were not fully vaccinated in the early 2000s. ⁽¹⁶⁾

When we spoke to a representative from UKHSA about the potential for an outbreak in the local area, they told us that **“the risks are there”** and emphasised how rapidly a situation could emerge.



Source: GOV.UK

“In my experience, it only takes maybe one case to get the ball rolling. And particularly if you have a borough where the immunisation rates are not great... that impact [will] be a bit quicker than expected.”
Vaccine Delivery Partner ⁽³⁾

This was experienced in 2019 when Wandsworth experienced an outbreak of Measles ... [Read more on page 20.](#)

An outbreak of VPD can have serious and wildly ranging implications on the local community. For example, a measles outbreak may have the following impacts –



AFFECTED INDIVIDUALS may be very unwell. Measles can have serious complications including long-term disability. One in every 1,000 cases results in encephalitis, and nearly one to three of every 1,000 will die.



HEALTH SERVICES may be overwhelmed by demand. Between 20% and 40% of measles cases will require a hospital visit, depending on the patient’s age. This may compromise the delivery of primary and secondary healthcare.



LOCAL ECONOMY will be affected by direct costs to the health system for medical treatment and outbreak control, as well as indirect costs from productivity losses and community closures.



SCHOOLS AND EARLY YEARS SETTINGS may be disrupted due to pupil absence or closure of settings to control and contain outbreaks.



PUBLIC TRUST may be weakened depending on the effectiveness of outbreak response.

“Outbreaks... have all these knock-on effects on the health system that perhaps you don’t notice when you’re responding. Outbreaks are like black holes, they draw in all resources, all expertise.”

Devi Sridhar, University of Edinburgh Medical School ⁽²²⁾

SECTION ONE

The impacts of an outbreak of VPD will not be experienced equally within a population. Groups of people who are more vulnerable will experience the outbreak more severely than others. As explained by one partner – “There are going to be more vulnerable individuals in the community [for whom] ... the impact is going to be more severe on them. Which is unfortunate, because then it leads to higher risk of morbidity. You know, there’s higher mortality rates because of that.”⁽³⁾ This is a major health inequality issue.

To really understand the potential risks of low and reducing rates of immunisations, we don’t need to look far back. The COVID-19 pandemic starkly demonstrated the severe risks associated with an outbreak of infectious disease. COVID-19 spread around the world like a wildfire, killing thousands of people in its wake. It is only due to the introduction of the COVID-19 vaccination programme that the course of the pandemic was altered. The pandemic also exposed how an outbreak of infectious disease is not experienced equally. The risk of death from COVID-19 was greatest in some, more vulnerable, population groups. This included people from older age groups, people with pre-existing health conditions, people living in more deprived areas and people from ethnic minority groups.⁽²⁵⁾ Yet it was individuals from some of these groups that were the least likely to receive vaccination when the programme began in December 2020.⁽²⁶⁾

The COVID-19 pandemic reinforced how wide-reaching the implications of an outbreak of infectious disease can be. The pandemic and periods of lockdown had deep impacts on the UK population ranging from the implications on physical health for those unable to access healthcare services, to educational outcomes for children affected by school closures, and the exacerbation and solidification of existing inequalities in society.⁽²⁷⁾ It is still too early for us to fully appreciate and comprehend the impacts that the pandemic may continue to have for many years to come.



SECTION ONE

2019-2020 Measles outbreak in Wandsworth

The start of the school year always brings new and exciting challenges for children. Autumn term of 2019 was no exception. Mixing between children and their wider networks as pupils meant that by the end of September there had already been 60 confirmed cases of measles in Wandsworth.

Wandsworth Council's Public Health and Education teams worked alongside PHE to understand and mount a rapid response to contain the outbreak. Unpicking the epidemiology of cases, working with schools and local GPs to rapidly implement guidance to contain the spread of measles infection and offering vaccination to prevent further spread.

Cases primarily emerged in secondary schools, with children of this age belonging to "Wakefield cohorts" whose uptake was affected by unfounded stories in the early 2000s about the vaccine causing autism. These cohorts therefore had high levels of susceptibility to measles, enabling a rapid spread of infection through school networks. Outbreaks were seen across multiple schools in the borough, and cases also spread across South London.



Source: Evening Standard

“Potentially some of that cohort were from the time around the Wakefield scandal... There were a couple of parents that we spoke with that still maintained that as a result of reading that paper, they didn't want to vaccinate their children.”

Vaccine Delivery Partner ⁽³⁾

Wandsworth Town Hall 'catches measles'



Source: Wandsworth Council

With over 100 suspected cases of measles in the local area, a wide scale publicity campaign was launched. The characteristic measles rash was projected on the walls of the Town Hall as part of a wider campaign to put the **spotlight** on the danger of measles and raise the profile of MMR vaccination.

Public Health messaging was promoted borough wide through schools, children's centres, libraries and other settings. Over 20,000 copies of the Headstart magazine were distributed to parents and carers of children attending Wandsworth schools, promoting the urgency of the issue. Schools were a vital point of engagement with parents and carers, and the Director of Public Health supported headteachers to champion public health messaging.

Vaccination was essential to protect the population. Teenagers and young adults were encouraged to check their vaccination status, and community vaccination clinics were stood up across the borough to maximise opportunities to vaccinate the population.

“What we did, which was really excellent, was that we had some clinics at the schools affected, so parents had a choice...some came and ... their children were able to have [their MMR vaccine].”

Vaccine Delivery Partner ⁽³⁾

SECTION ONE

Human Papillomavirus (HPV) vaccine

The HPV vaccine offers protection against **human papillomavirus**.

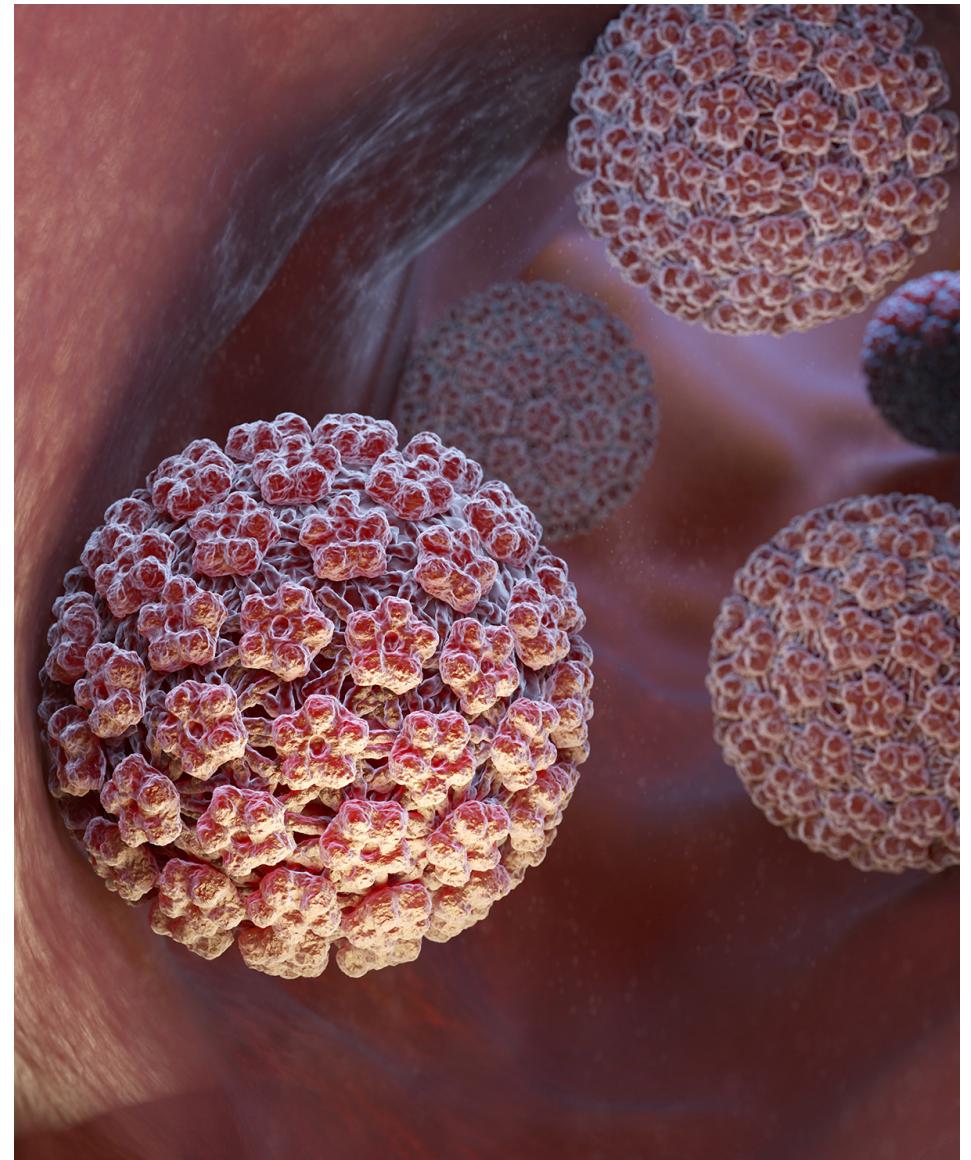
The vaccine was first introduced to the UK national immunisation schedule for girls in 2008 and was extended to include boys in 2019. Men, aged 45 years and under, who have sex with men (MSM) are also eligible for the HPV vaccine because they are considered at a higher risk of HPV infection, as unlike unvaccinated heterosexual men, they do not benefit from the protection from a female vaccinated partner.

HUMAN PAPILOMAVIRUS is a very common virus that lives on the skin in or around the genital area, as well as the mouth and throat. There are over 100 different types of HPV. Most types of HPV do not cause any symptoms and get better by themselves over time. However, other HPVs are high-risk and can cause genital warts or increase the risk of developing some cancers later in life. This includes cervical cancer, some mouth and throat cancers and some cancers of the anus and genital areas. They are transmitted primarily through sexual contact. ⁽²⁾

The HPV vaccine is offered to all girls and boys in school in year eight, and delivered by the School Aged Immunisation Service (SAIS) team within the school setting. Previously teenagers were offered two doses of the vaccine where a second dose was also offered six to 12 months later. Following the success of the programme from September 2023, only one dose is required.

“ [The] school age immunisation programme team at HRCH... do wonderful work. And all the school nurses out there. I think they do...brilliant work because they have these conversations, and they encourage uptake. And the uptake is really good. ”

Vaccine Delivery Partner ⁽³⁾



SECTION ONE

What are the risks of low HPV vaccination coverage?

The HPV vaccine gives protection against the most high-risk strains of HPV, including ones which cause cervical, mouth and genital cancers. Cervical cancer is the most common cancer in women under the age of 35 in the UK. Around 3,200 women in the UK are diagnosed with cervical cancer each year, and around 900 women die from it. ⁽²⁾ Despite this, 99.8% of cervical cancer case are preventable. ⁽²⁸⁾

In South West London in 2021, there were 73 women diagnosed with cervical cancer. This reflects an increase compared to 2020 where 56 women were diagnosed. ⁽²⁹⁾ This increase should be interpreted with caution as it is likely due to more cervical screening and identification of people at an early stage of disease.

99%
of cervical cancer cases are caused by HPVs.

High uptake of the HPV vaccine will mean that future generations are protected from developing cervical cancer. ⁽³⁰⁾ Although the programme is relatively new, there are promising indications that dramatic reductions in cervical cancer rates should be expected in years to come. Since the introduction of the HPV vaccine programme, rates of cervical

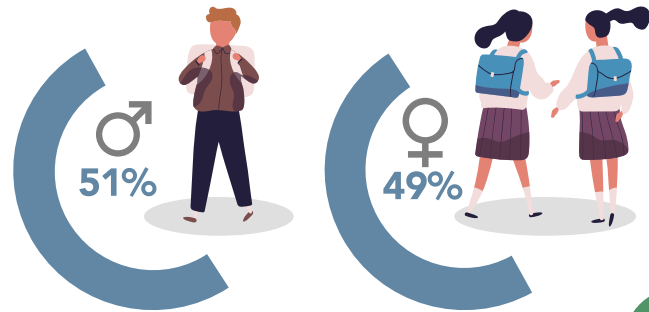
cancer among women in their 20s that were offered vaccination aged 12 and 13 have reduced by almost 90% in England. ⁽²⁾ It is estimated that by 2058, after 50 years of the HPV vaccination programme, 64,000 cervical cancers and 50,000 other cancers will have been prevented. ⁽³²⁾



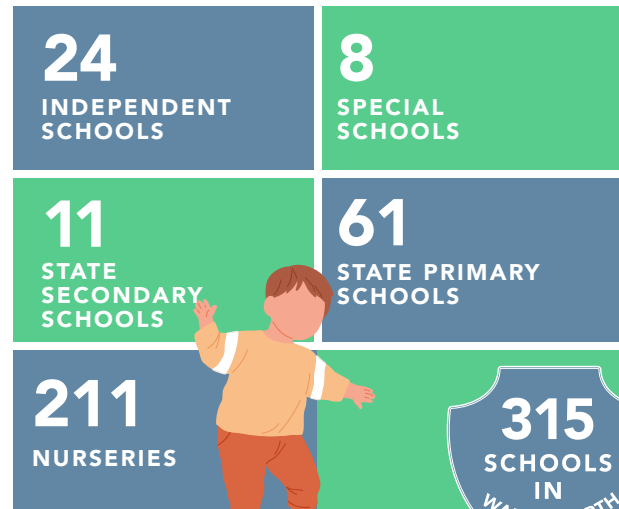
But the benefits of HPV vaccination are not limited to reducing cervical cancer incidence in women. HPV infections are responsible for a range of non-cervical diseases in both men and women, including genital warts, anal, penile, and oropharyngeal (mouth) cancers, which can cause serious morbidity. The HPV vaccination programme offers protection against all these diseases. PHE data indicates that between 2009 and 2017, diagnoses of genital warts reduced by 90% in 15–17-year-old girls and 70% in 15–17-year-old boys. ⁽³³⁾

SECTION ONE

Our child population in Wandsworth

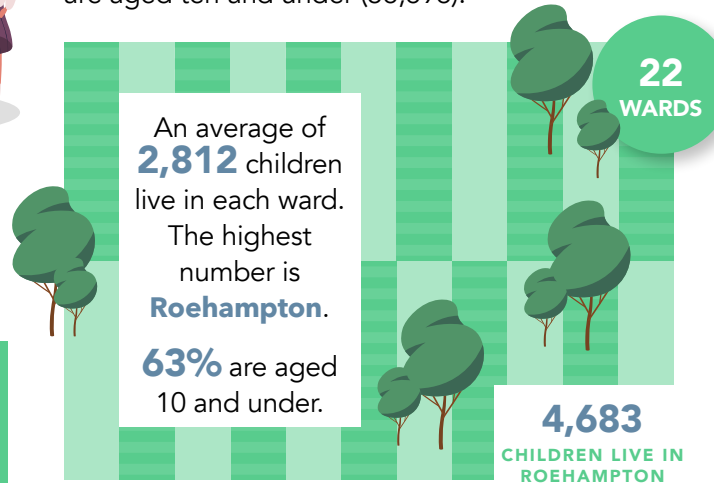


In 2021 in Wandsworth, 49% of **0-18-YEAR-OLDS** were female and 51% were male.⁽³⁴⁾

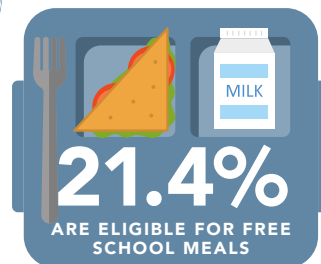


In Wandsworth, there are 211 nurseries, 61 state Primary Schools, 11 state secondary schools, 8 special schools and 24 independent schools. These sites may be at risk if an outbreak were to occur in the local area.

In 2021, there were 61,851 **0-18-YEAR-OLDS** living in Wandsworth, of whom nearly two thirds are aged ten and under (38,896).



The number of primary school children in Wandsworth eligible for **FREE SCHOOL MEALS** increased from 17.2% in 2019 to 21.4% in 2023.⁽³⁸⁾



In 2021, in Wandsworth 54.6% of **0-18-YEAR-OLDS** were of **White Ethnicity** and 45.4% were from **Black, Asian or Minority Ethnic** communities. National research has shown that children born to mothers who are Caribbean, Any other ethnic group, White and Black Caribbean, and Any other Black, African or Caribbean background have lower uptake of the MMR vaccine.⁽³⁵⁾

6,429 15-YEAR- OLDS LIVING IN WANDSWORTH IN LOW INCOME FAMILIES



In 2022, there were 6,429 **15-YEAR-OLDS** living in Wandsworth living in relative low-income families*, reflecting one in ten 0–15-year-olds. This proportion was higher in certain areas where approximately one in four 0–15-year-olds living in the Latchmere, Roehampton and Putney Health areas were living in low-income families.^(36,37,38) Several studies have shown that children living in low-income families have lower uptake of the MMR vaccine.⁽³⁹⁾

*Low income is families whose income is below the threshold calculated in the Households Below Average Income data series. A family must have claimed one or more of Universal Credit, Tax Credits or Housing Benefit at any point in the year to be classed as low income in these statistics.

SECTION ONE

MMR vaccine uptake in Wandsworth

The proportion of children receiving at least one dose of the MMR vaccine has fluctuated over the past 13 years. It was at its highest between April 2017 to March 2018 where 92.5% (4,608/4,980) of children had received at least one dose by their second birthday. However, by April 2022 to March 2023, only 83.7% (3,312/3,955) had received at least one dose by their second birthday. Compared to London as a whole, Wandsworth has a slightly higher coverage of MMR 1 in two-year-olds. ⁽⁴⁰⁾

Further to this, the proportion of children receiving two doses of the vaccine (fully vaccinated) has also continued to decline each year, where between April 2010 to March 2011, 86.7% (3,525/4,068) of children had received both doses of the vaccine by their fifth birthday. Whereas by April 2022 to March 2023, this proportion declined to 75.2% (3,221/4,286). Compared to London as a whole, Wandsworth has slightly higher coverage of MMR 2 for five-year olds. ⁽⁴⁰⁾

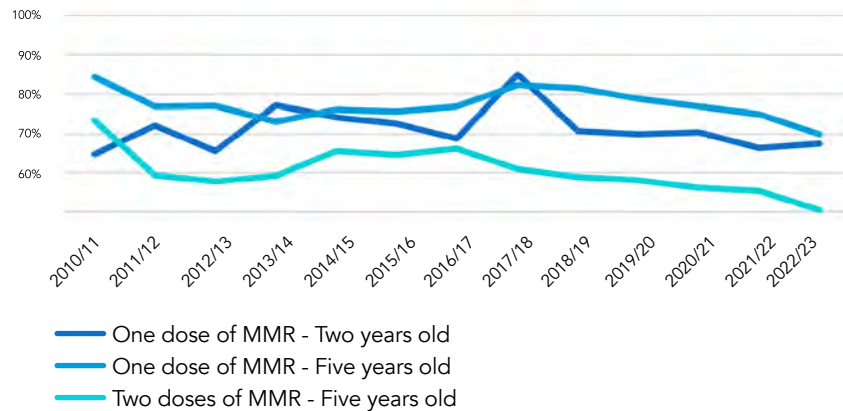


Figure 1 Proportion of two- and five-year-olds who have received one or two doses of the MMR vaccine, Wandsworth.

Source: COVER, UKHSA

Scale of unvaccinated children

Between April 2022 to March 2023 in Wandsworth there were 643 two-year-olds and 648 five-year-olds who had no protection against MMR. Further to this there were 417 five-year-olds who only had a partial protection against MMR (only received one dose). ⁽⁴⁰⁾

However, these children are not the only ones susceptible to MMR. Cumulatively between April 2013 and March 2023, 5,596 children did not have any MMR protection by their fifth birthday, and a further 4,028 children only had a partial protection against MMR by their fifth birthday. This represents an estimated 9,624 children who are unprotected or insufficiently protected against MMR. This equates to approximately one in five children born between April 2008 and March 2018 in the borough. ⁽⁴⁰⁾

Approximately one in five children born between April 2008 and March 2018 in the borough are unprotected or insufficiently protected against MMR.

Estimated scale of insufficient protection - missed vaccination in historic cohorts in Wandsworth

Source: (COVER DATA 2013-2023)

LEVELS OF PROTECTION FROM VACCINATION AT AGE 5	NUMBER OF CHILDREN
NO PROTECTION (MMR1)	5,596
INSUFFICIENTLY PROTECTED (MMR 1 ONLY)	4,028
TOTAL UNPROTECTED OR INSUFFICIENTLY PROTECTED	9,624

SECTION ONE

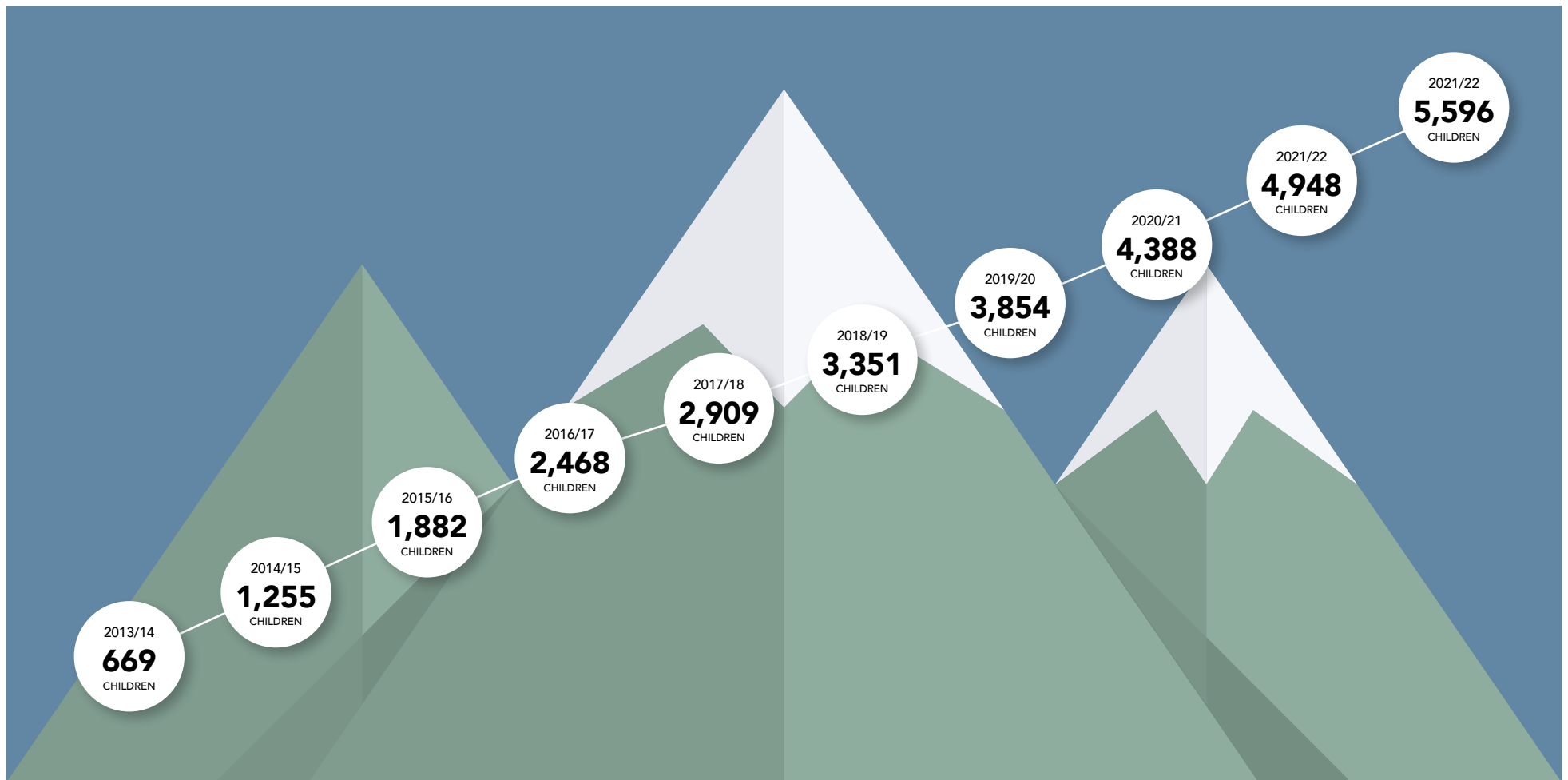


Figure 2 Cumulative number of children with no MMR vaccination in Wandsworth since April 2013

Source: COVER, UKSHA

The number of unvaccinated children is calculated from the number of eligible children who have not received one dose of the MMR vaccine by their fifth birthday by the March of each year. These figures assume that children who have not been vaccinated by their fifth birthday will never get vaccinated.

SECTION ONE

HPV vaccine uptake in Wandsworth

HPV vaccination is generally delivered in secondary schools, and the first dose is usually administered in spring term each year. The vaccine delivery was significantly affected by the COVID-19 pandemic, where between April 2019 and March 2020, 4.6% of 12–13-year-old girls and 8.9% of 12-13 year old boys received their first dose of the vaccine. ⁽⁴¹⁾ Encouragingly by the following year, the proportion vaccinated increased to 78.0% for girls and 70.5% for boys. Despite this increase to similar levels pre-pandemic, the proportion decreased to 68.3% for girls and 61.5% for boys in 2022/2023. Compared to London as a whole, coverage of the first dose of HPV for both genders is lower in Wandsworth. ⁽⁴²⁾

The administration of the second dose of the HPV vaccine usually occurs in the spring term and was significantly affected by the COVID-19 pandemic where between April 2020 and March 2021, only 3.8% of 13–14-year-old girls and 6.9% of 13–14-year-old boys received their second dose of the vaccine. However, by 2022/2023, this proportion increased to 78.7% and 70.6% respectively. Compared to London as a whole, coverage of the second dose of HPV for both genders is higher in Wandsworth. ⁽⁴²⁾

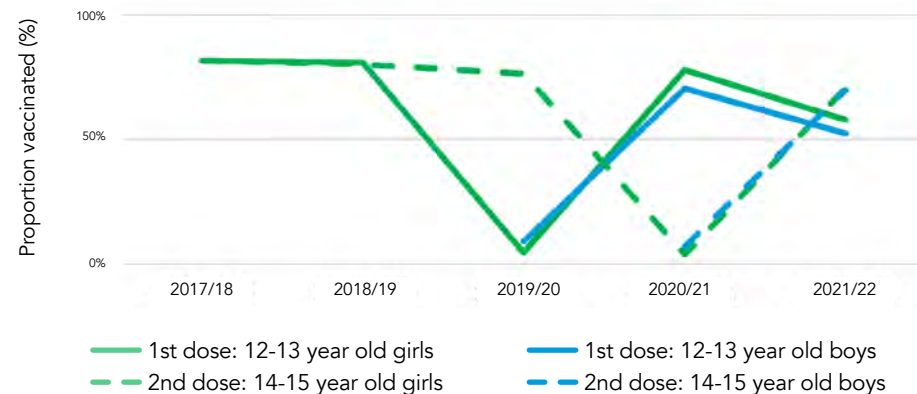


Figure 3 Proportion of teenagers in Wandsworth who have received one or two doses of the HPV vaccine. Source: UKHSA

SAIS providers reflected on the uptake of the HPV vaccination programme in Wandsworth. They told us that they -

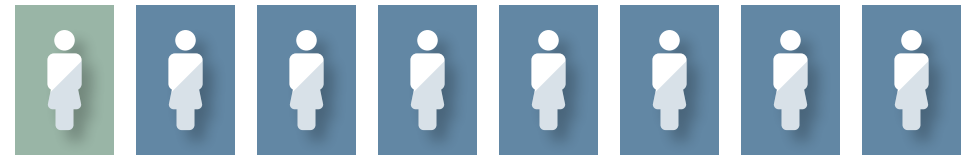
“ Want [uptake in Wandsworth] to be in a better place. It’s certainly not as poor as other boroughs. But given the knowledge and the intelligence that I have from South West London in general, Wandsworth is the borough that we feel needs the most support interventions.”

SAIS Representative ⁽³⁾

Scale of unvaccinated young people

It is estimated that approximately 1,000 girls who were born between September 2003 and August 2009, and almost 1,500 boys who were born between September 2006 and August 2009, may not have received any vaccination against HPV. ^(41,42) This means that approximately:

One in eight girls in Wandsworth born between September 2003 and August 2009 may not have received HPV vaccination.



One in three boys in Wandsworth born between September 2006 and August 2009 may not have received HPV vaccination.



SECTION ONE

What do young people in Wandsworth think about the HPV vaccine?⁽⁴³⁾

Public Health conducted a survey to capture the perspectives of 16 to 18-year-olds on HPV vaccination. The survey was distributed through schools, local youth groups and the local youth councils. Encouragingly, most survey respondents had heard about the HPV vaccine and had received information about it. Most commonly, respondents received information about the vaccine at school either in a lesson, an assembly or through a leaflet.

Most respondents had received at least one vaccine, of whom 12 had completed the schedule. Most reported that they received the vaccine in order to protect themselves from serious diseases and other common reasons reported included

- protecting others around them
- their parent or guardian wanted them to get vaccinated
- or they didn't really think about it.

This highlights that respondents were aware of the important role that the vaccines play in both protecting themselves and others around them. But there was an element of it being a standard practice to get vaccinated as they didn't think that much about it.

“ I didn't receive the vaccine when it was offered to me because I was scared of needles at the time. However, if it was offered to me now I would accept. ”

Young Person ⁽⁴³⁾

Three respondents had not received a dose of the HPV vaccine, this was due to; not being aware of the vaccine, having missed their appointment or being afraid of needles. This highlights the need to re-offer the vaccine to people who have either previously declined or missed the offer .

For those who had received the vaccine, the preferred method of receiving information about the vaccine was via posters and leaflets at school or via an email. For those who had not received the vaccine, there was not one preferred route to receive information about the vaccine. Although this is based on a small number of people who responded to the survey, it does highlight the need to provide information to those who are not yet vaccinated through a variety of different channels.

Half of respondents reported that they did not have any concern about the vaccine. But if they did have any concerns, they would speak to their family or GP. These results indicate that these respondents want to receive clear written information about the vaccine given to them directly, and that they would go to trusted people to discuss any concerns.

Currently the SAIS programme sends information about the HPV vaccine and a consent form to parents directly via email. Our findings support the provision of information about the vaccine directly to parents and guardians, but they also highlight the importance of providing clear written information about the vaccine to teenagers before they are offered the vaccine.



SECTION TWO

Why we haven't moved the mountain (yet): challenges to achieving target vaccination coverage

There are many reasons why target vaccination coverage is not currently being achieved in Wandsworth, and why some groups of parents may struggle more than others to bring their child forward for vaccination. Many of these reasons are not unique to Wandsworth but are experienced similarly at regional and national levels. As reflected on by one of the partners, these challenges are “pretty much the state of the nation.”

This section explores some of the challenges to improving childhood vaccination rates in Wandsworth, with a particular focus on the MMR and HPV vaccines. These challenges are told by those closest to the vaccination programme in the borough. Evidence of local challenges to vaccination was gathered during engagement with parents, young people, GPs, and vaccine delivery partners, through surveys, interviews and focus groups. Their views and perspectives are featured throughout this section.

Many partners we spoke to have been involved in the local vaccination programme for many years. They reflected on the challenges to improving immunisation rates in Wandsworth as historic, enduring, and prevailing despite their work to bring improvement. This section collates all the evidence of the challenges to vaccination in Wandsworth that will equip and empower the system to make headways on moving the mountain.

“These are historic challenges. And it just seems to me that they are mountains that nobody could move for whatever reason.”

Vaccine Delivery Partner ⁽³⁾

SECTION TWO

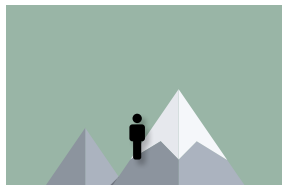
Inequalities in childhood vaccinations

All children deserve a healthy start in life so that they can reach their full potential as they grow into adults. Receipt of childhood vaccinations is vital to protect children from disease and promote good health from infancy. From the outset the journey to vaccination is not equal. The circumstances in which a child is born and lives can make them more or less likely to receive a vaccination, which can have a lifelong impact on their ability to thrive in good health. Whilst one child may have to climb Everest to be fully vaccinated (child A), others may only face a 100ft climb (child B). Some may be flown in a helicopter to the top of the mountain (child C).

Which mountain must be climbed to receive vaccination?



Child A



Child B



Child C

HEALTH INEQUALITIES are unfair and avoidable differences in health across a population, and between different groups within a population. These include how long people are likely to live, the health conditions they may experience and the care that is available to them.

The **WIDER DETERMINANTS OF HEALTH** are the conditions in which a person is born, grows, lives, works and ages, that impact their health and wellbeing. They are often interlinked. For example, someone who is unemployed may be more likely to live in poor quality housing with limited access to fresh and healthy food.

“ Giving every child the best start in life is critical for reducing health inequalities across the life-course. ”

Michael Marmot ⁽⁴⁴⁾

In 2021, PHE carried out a **Health Equality Audit (HEA) of the national immunisation programme**, and identified several factors that might make a child less likely to be fully vaccinated than the general population ⁽⁴⁵⁾.

These factors included:



Place of residency



Socio-economic status



Ethnic group

They found that vaccination coverage was significantly lower in some vulnerable and under-served populations. This included people with chronic illness or disabilities, migrants, Travellers and Roma communities, and looked after children. They also found that additional support may be needed for children of lone parents and children from a large family (more than four children). ⁽⁴⁵⁾

Studies have also shown that children from some ethnic groups are less likely to receive vaccination, particularly children from the Black Caribbean group and other Black, African and Caribbean groups. These ethnic inequalities have worsened – the difference in coverage for a full course of MMR vaccination increased from 12% in 2011/12 to 29% in 2020/21. ⁽³⁵⁾

“ Demographics can play a huge factor [in vaccine uptake]. ”

Vaccine Delivery Partner ⁽³⁾

SECTION TWO

In Wandsworth, a child is less likely to receive the MMR vaccine if they...

Live in the outer areas of the borough. ⁽⁴⁶⁾

This includes areas such as:

- Nine Elms
- Queenstown Road
- Roehampton
- Putney Heath
- Tooting Broadway

These are some of the **most deprived** areas that this was influenced by factors such as education, literacy, language and culture. ⁽³⁾

Are from a Black ethnic group, including: ⁽⁴⁶⁾

- Black African
- Black Caribbean
- Black Other
- Mixed White and Black African
- Mixed White and Black Caribbean

Are from **Gypsy** or **Traveller groups**. As of April 2019, there were 12 children under the age of 18 known to be living in a registered Caravan site. ⁽⁴⁷⁾

Have a younger mother. ⁽⁴⁸⁾

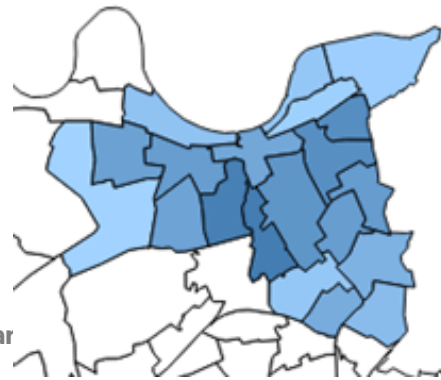


Figure # - Uptake of the MMR vaccine by ward in Wandsworth

Darker shading indicates higher uptake of the MMR vaccine, lighter shading indicates lower uptake of the MMR vaccine.

Source: SWL Childhood Immunisation Dashboard

“ We do have deprived areas in Wandsworth, as you know, in Roehampton, Latchmere as well... There are also people with language barriers, so you know people may not be able to communicate in English and they wouldn't know what the practice is offering in terms of immunisations... so that is also important for us to tap into those hard-to-reach communities. ”

Vaccine Delivery Partner ⁽³⁾

LOCAL DATA LIMITATIONS

Addressing vaccine inequalities is a key public health priority. But action in this area requires having access to local data that indicates which groups in the population are less likely to receive vaccination.

Whilst literature and national studies such as the PHE Health Equality Audit can provide some insights, inequalities in vaccine uptake can be complex to map out and may vary between areas. Community and institutional factors, as well as the health beliefs and knowledge of individuals or communities, can also influence whether a child receives vaccination.

Due to the data limitations highlighted above, at present local data can only provide a high-level understanding of vaccine inequalities in the borough. Direct engagement with residents, including groups known nationally to have low vaccine uptake, has aided local understanding. Improving availability and access to local data on vaccine inequalities should be addressed as a priority to help improve equity of access, uptake, and health outcomes for the population.

SECTION TWO

2. Vaccine hesitancy and refusal

When approaching the mountain of vaccination, some parents may feel uncertain about whether to begin the climb. This may be because they feel that there are risks to climbing, because they do not know how to climb, or because they do not feel that there is a need to climb. Some parents may make it part way, and then refuse to climb any further. Others may not even contemplate beginning the climb.

These parents are commonly referred to as being vaccine hesitant.

Vaccine hesitancy is defined by WHO as a “**delay in acceptance or refusal of vaccines despite availability of vaccination services**”.⁽⁴⁹⁾ Hesitancy is caused by complex factors that can be specific to an individual.⁽⁵⁰⁾ It is important to understand the reasons that parents may feel hesitant towards vaccines in order to improve confidence and tackle the misinformation that seeks to undermine this.

Concerns about vaccination are not a new phenomenon. Throughout history, vaccine hesitancy has arisen for varied and complex social, political and cultural reasons. When Dr Edward Jenner created the world’s first successful vaccine in 1796, it received scepticism and criticism. Many early critics thought vaccination was unclean or immoral, especially because it involved transferring ‘foreign’ fluids into bodies. This criticism was depicted in a cartoon by James Gillray created in 1802, which shows Edward Jenner inoculating people who then developed cow-like features.⁽⁵¹⁾



Source: Coloured etching by James Gillray. 1802.

Although concerns about vaccination are not new, in recent decades there has been a growth in vaccine hesitancy and refusal. Partners reflected on how parents previously “just went along with the flow” and provided vaccinations to their children, whereas GPs now “continually express concerns around trying to convince parents” to provide vaccination.⁽³⁾

Vaccine Hesitancy was named as one of the top ten threats to global health by the WHO in 2019.⁽¹⁵⁾

The resurgence of vaccine hesitancy in recent decades can largely be traced back to the Wakefield Scandal – **read more about this on page 33**. With his 1998 paper, Wakefield stimulated fear among many parents that the MMR vaccine would cause autism. Whilst this association and Wakefield’s paper have since been discredited, it has created an enduring concern about the wider safety of vaccines, supercharged by the growth of social media and rise of a misinformation age – **read more on page 34**. Partners reported that they are seeing more and more parents who are “staunch anti-vaxxers”, and that parents increasingly feel concerned about the safety of all routine childhood vaccinations. As one GP told us - “the majority [of parents] that don’t come say, I don’t want any vaccinations for my child, rather than specifically the MMR”.⁽³⁾

Broadly, there are three reasons why parents may be hesitant or refuse to provide vaccination to their children:⁽⁵²⁾

CONFIDENCE: they do not trust the vaccine or the vaccine provider.

COMPLACENCY: they do not perceive the need for a vaccine, or do not value the vaccine.

CONVENIENCE: they struggle to access the vaccine.

These factors are not experienced in isolation. A parent may be hesitant or refuse to vaccinate their child due to a combination of confidence, complacency, and convenience. Hesitancy also varies by vaccine, meaning parents might refuse or delay one vaccine but accept others.⁽⁵⁰⁾

SECTION TWO

Confidence

One of the most common reasons that parents decide not to vaccinate their children is that they do not have confidence in the safety of vaccines. Parents may be concerned that a vaccine will have adverse side effects on their child, which they worry may be more serious than the disease itself. Parents of children who were not fully vaccinated with MMR vaccination mostly reported that they had concerns about the ingredients in the vaccine. ⁽⁵³⁾ Similarly, the Royal Society for Public Health (RSPH) found that fear of side effects was the main reason that parents did not provide vaccination to their children. ⁽⁵⁴⁾

Whilst some parents are concerned about the potential side effects of all vaccines, others are more concerned about the specific vaccines. For example, some parents have a particular concern about their children receiving a combination vaccine, such as the MMR or 6-in-1 vaccine. These parents worry that a combination vaccine will overload their child’s immune system and they will not be able to cope with receiving several vaccines at once. ⁽⁵⁵⁾ On the contrary, evidence suggests that a child’s immune system can easily cope with singular or several vaccines. Children’s immune systems are constantly working to protect against bacteria and viruses in their daily environment, and vaccines present only a very small challenge to a child’s immune system compared to what they encounter daily. ⁽⁵⁶⁾

Whilst concerns about vaccine safety may lead some parents to refuse vaccinations for their children altogether, others may look for alternative ways to mitigate the risks. For example, some parents prefer to delay providing the MMR vaccine to their children until they have shown good signs of development, such as talking, or they may provide their children with a singular, non-combined vaccines. ⁽⁴⁸⁾

Confidence in vaccination may also be undermined if parents do not trust the system that develops, delivers, or administers the vaccines. For example, some parents feel that the vaccine providers have historically mishandled vaccine scares such as the Wakefield paper, and this has undermined their confidence in vaccination. Some parents also fear collusion between pharmaceutical companies and the government, and so do not trust the research on vaccine effectiveness and safety. ^(57,58,59,60) Feelings of mistrust may be exacerbated if a parent feels that they are being pressured into providing vaccination to their child. As one partner explained – “[Parents] think we’re doing something to them. They think there’s this subculture of them not having a choice, and they’re fed up of that.” ⁽³⁾

“There are a lot of individuals or communities where there are long standing beliefs on vaccinations.”
Vaccine Delivery Partner ⁽³⁾

Some population groups are more likely to mistrust the vaccine system than others. For example, studies have highlighted that mistrust is often higher in Black ethnic groups and Gypsy and Traveller communities. ⁽⁶¹⁾ This was exemplified during the COVID-19 pandemic. Black people older than 80 years were only half as likely as White people to receive vaccination against COVID-19, despite being four times more likely to die from the infection. ⁽²⁶⁾ The most common reasons for hesitancy within these groups were concerns about safety, as well as lack of trust in the government and public health agencies. This is rooted in historical marginalisation, including previous unethical research, and exacerbated by ongoing systemic racism and discrimination, in the healthcare system and beyond. ⁽⁶¹⁾ Understanding the roots of mistrust is crucial to build and support community confidence in vaccination.

SECTION TWO

The Wakefield Scandal

In 1998, a former British doctor, Andrew Wakefield, along with twelve colleagues, published an article in the prestigious medical journal, The Lancet, which falsely linked the MMR vaccine to autism. The article prompted a plethora of negative stories in the mainstream media about the potential risks of the MMR vaccine. Headlines proclaimed, “MMR Killed My Daughter” and “Why I wouldn’t give my baby the MMR jab”, and a tabloid newspaper published a series of articles showcasing parents who claimed their children had life-long impacts from the vaccine. ⁽⁶²⁾



“There was Wakefield that turned everything up with his lies, really, that people believed.”

Vaccine Delivery Partner ⁽³⁾

Wakefield’s research has been discredited and several studies have disproved the association between the MMR vaccine and autism. ^(63,64,65,66) Wakefield himself was struck off the medical register in 2010 for serious professional misconduct including dishonesty, irresponsibility and breaching ethical protocols. ^(67,68,69)

THERE IS NO EVIDENCE THAT THE MMR VACCINE CAUSES AUTISM.

One of the biggest studies to disprove the link between the MMR vaccine and autism was carried out in Denmark. Two studies – the first published in 2002 and the second in 2019 - compared the proportion of children that were diagnosed with autism amongst those that received the MMR vaccine, and those that didn’t receive the vaccine. The studies found that rates of autism were the same in each group, suggesting that the MMR vaccine had no effect on development of autism.

Similar conclusions have also been drawn from studies in Poland, Japan, the UK, and the US. ^(63,64,65,66)

However, the scandal had a significant and sustained impact on MMR vaccine uptake. In the UK, the MMR vaccination rate fell from 92% in 1996 to 80% in 2003, leading to a rise in measles cases in the UK from 2005. ^(70,71) In 2006, the first death from the disease in 14 years was reported. In 2008, measles was declared endemic (a disease or condition commonly found among particular people or in a certain area) in the UK for the first time in 14 years. ^(71,72) Similar trends were also observed in the United States (US) and France, among others. ^(73,74) Reduced vaccinations over this period generated what is known as the ‘Wakefield cohort’ of children who were not vaccinated between 1998 and 2004, who are now at a higher risk of catching mumps, measles and rubella.

The scandal also fundamentally changed some people’s views towards and trust in the MMR vaccine, and vaccinations more broadly. Many parents still believe that the MMR vaccine has ‘risks’ which outweigh the benefits. GPs told us that the most common reason that parents in the borough are hesitant to give the MMR vaccine to their child is because they are concerned about the risk of their child developing autism. ⁽⁷⁵⁾ Similarly, in a recent focus group on vaccine hesitancy led by the NHS SWL ICB, the majority of parents in attendance expressed concerns about the link between the MMR vaccine and autism. Although they were aware of statements confirming that there was no established link, they felt that they had been given no evidence to prove this. ⁽⁷⁶⁾ Even when directly faced with the risks of a VPD during the 2019 measles outbreak in Wandsworth, some parents felt that the risks of providing vaccination were greater than not vaccinating. Partners involved with managing the outbreak told us that “there were a couple of parents that we spoke with that still maintained that as a result of reading that paper, they didn’t want to vaccinate their children.” ⁽³⁾

“There are a lot of children now who are being diagnosed with ADHD, with autism, being on the spectrum. There’s ... much more awareness now than there ever was. And I think a lot of parents still put that link with [MMR].”

GP Practice Staff Member ⁽⁷⁵⁾

SECTION TWO

The growth of anti-vaccination movements: social media and misinformation

In recent years, vaccine hesitancy has taken on new urgency due to the proliferation of anti-vaccination misinformation on social media. Whilst social media has provided an unprecedented capacity for the public to communicate, it has also been a major factor in the rise of misinformation and disinformation that is damaging to public health. Social media has provided a space for groups to self-organise around shared beliefs, thus establishing a medium for such news. ⁽⁷⁷⁾

<p>MISINFORMATION</p> <p>Inaccurate information that is unintentionally recorded as fact.</p>	<p>DISINFORMATION</p> <p>The deliberate spread of false information to cause harm.</p>
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For example, in 2017 a targeted campaign of misinformation was launched by anti-vaccination movements against the HPV vaccine. A video published on YouTube claimed that there have been “hundreds of documented deaths following the HPV vaccine” and “thousands around the world have suffered severe adverse reactions to the vaccine.” The video sparked sensationalised media articles that highlighted cases of potential reactions to the vaccine. ⁽⁵⁴⁾



Source: Daily Mail Online

Encouragingly, most parents surveyed said that they would not trust or look for information about vaccination on social media, and instead preferred to receive information from trusted sources such as a healthcare professional, their GP or the NHS website. ⁽⁵³⁾ But amongst parents whose children were not up to date with vaccinations, many reported that they would like to receive information about vaccinations through social media or online advertising. ⁽⁵³⁾ This highlights the importance of sharing clear and factual information about vaccination on social media.

Even amongst parents that actively decide to seek information from trustworthy sources, it can be challenging to avoid misinformation. Parents will be exposed to negative information about vaccination even when they are not looking for it. A survey by the RSPH found that one in two parents with children under five years old said that they are exposed to negative messages about vaccinations online ‘often or sometimes’. ⁽⁵⁴⁾ Repeated exposure to negative vaccination message may over time be taken as accuracy and influence a parent’s attitude to vaccinations. This can be particularly challenging for parents to ignore when in the throes of the post-birth period, as one parent explained -

“There’s a lot of misinformation about when you got a baby. It’s quite emotional and you feel like you don’t want to do any harm to them. So I didn’t want to be in that vulnerable state, like anything that would make me feel guilty about giving them the vaccinations.”

Parent ⁽⁷⁸⁾

Parents may also find it challenging to detect that they are receiving misinformation. False information about vaccination is received in various forms, and whilst sometimes misinformation can be easily identified, it can also be circulated subtly and through sources presumed to be trustworthy. For example, partners highlighted the influence that a parent’s social network – real or virtual – can have on their decision to vaccinate. ⁽³⁾ Partners also claimed that a private vaccination company is spreading misinformation about the ingredients in vaccines. ⁽⁴⁸⁾

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Due to the volume of “bizarre information ... on the web”, parents told us that it can be challenging to know where to access reliable information about vaccination. ⁽⁷⁸⁾ One parent told us that, beyond the NHS website, they wouldn’t know where else to look because “it’s really hard to know wherever else you can trust”. ⁽⁷⁸⁾ Similarly, parents were also uncertain about who they would speak to if they had questions about vaccination. As one parent speculated - “I really wouldn’t know who to talk to about it. I wouldn’t bother the GP with it because it’s really hard to get an appointment... I don’t have a relationship with my pharmacist... If I did have any questions, I don’t know who I’d ask.” ⁽⁷⁸⁾

Complacency

Whilst some parents may not vaccinate their children due to lack of confidence, others choose not to vaccinate because they do not recognise the risks of VPDs, either to their child or to the wider community. For example, some parents believe that because the diseases that are vaccinated against are no longer prevalent, their child is at minimal risk of contracting the disease. ⁽⁷⁹⁾ Some parents also believe that if their child did contract the disease, their risk of illness or death would be low, and that it would be easily treatable. ⁽⁷⁹⁾ In response to a 2022 survey by NHS SWL, 12.5% of parents in Wandsworth said that they did not feel that it would be serious if their child contracted measles, mumps or rubella. ⁽⁸⁰⁾ This may make a parent complacent and lead them to ignore or delay vaccinating their child.

“ If I asked someone on the street, they probably wouldn’t even know what measles is, because it’s just unheard of. ”
Vaccine Delivery Partner ⁽³⁾



Don't let Measles, Mumps and Rubella into your child's world

The risk of catching Measles, Mumps and Rubella increases when your child goes to nursery. When you don't get your child their MMR vaccines, they're left exposed to becoming seriously ill.

Protect your child with both MMR vaccines.
Contact your GP to book their first or second dose. Find out more at nhs.uk/MMR



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It can be challenging for parents to really understand the risk of VPDs. For the most part, VPDs are no longer a visible and an immediate risk, which can make parents complacent to their continued risk. Some parents do not recognise that VPDs are only rare today because of the success of the national vaccination programme, and that this will only continue if high vaccination rates are maintained. Seven percent of parents in Wandsworth that responded to the SWL survey felt that vaccines were no longer needed when diseases are rare. ⁽⁴⁶⁾ It can also be hard for parents to understand the risk of VPDs when the consequences of not vaccinating may not be immediate. For example, the HPV vaccine prevents cervical cancer, which on average does not develop until a woman is between the ages of 30 and 34 years. ⁽⁸¹⁾

If a parent does not understand the risk of VPDs, they may feel that their child is at minimal risk by not receiving vaccination. This view may be reinforced if they feel that the potential side effects of vaccines are greater than the risks of not vaccinating. For example, a GP practice member told us that some parents refuse vaccinations because of “hearsay that friends or family children have had no vaccinations and they’ve always been extremely healthy... And they feel that the vaccinations are causing children to be less healthy than they would be if they had nothing.” ⁽⁴⁸⁾ Partners also reported that some parents do not recognise or understand the risk that not vaccinating their child may pose to the wider community. For example, we heard about a conversation between a local partner and a parent during the 2019 Measles Outbreak in Wandsworth – “they were like – well, what happens if my child just gets it, can’t they just have it naturally. And, you know, trying to explain that actually it’s not just about your child, it’s about other people in the school... But sometimes people are very short sighted and very much focused on their [own.]” ⁽³⁾



Complacency about vaccination will be influenced by many factors, including other life and health priorities, and some groups of parents will be more affected by these factors than others. ⁽⁵²⁾ For example, parents from lower socio-economic groups may feel that they have more immediate priorities than vaccination when protecting the health of their children, for example, putting food on the table. This may be exacerbated if vaccination is not accessible, for example, if a parent must travel to a vaccine appointment, and even more so if there are costs involved in travel.

Partners felt that there was a strong role for communications to tackle complacency through improving public understanding of the risks of VPDs. For example, one partner highlighted that “we don’t publicise the negative. You don’t see a picture of somebody with measles.” ⁽³⁾

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3. Availability, accessibility and convenience of vaccine appointments

If a parent decides to vaccinate their child and begin the climb up the mountain, there are supports that the vaccine delivery system can provide to make the journey as smooth as possible. In the first instance, parents need to be provided with the right tools to be able to climb. This includes the provision of sufficient vaccination appointments, which are delivered in a way that is accessible and convenient.

National studies have shown that the availability, accessibility, and convenience of appointments is an important factor in determining the levels of vaccine uptake. ^(54,82) An online survey of 2,622 parents by the RSPH found that timing (49%) and availability (48%) of appointments were the most common barriers to vaccinating children. ⁽⁵⁴⁾ These factors have been found to be particularly important determinants of vaccine uptake for parents who are not explicitly anti-vaccination but may be hesitant. These factors will also have more impact on the vaccine outcomes of particular groups of children. This includes children from low socio-economic backgrounds, whose parents may find it more challenging to attend an appointment if they have to take leave from work or pay for travel to a GP surgery. Children from families with multiple children are also more likely to be impacted by accessibility barriers ^(83,84,85).

Our engagement for this report revealed that there are differing perspectives on the availability, accessibility, and convenience of appointments in the borough. Most vaccine delivery partners did not feel that there were issues with availability and accessibility of appointments in Wandsworth. In our survey of GP staff, almost all respondents felt that they offered sufficient vaccination appointments to meet the demand for the MMR vaccine. Of the fourteen GP practices surveyed in Wandsworth, only one felt that they could not provide enough vaccination appointments to meet the demand. They reported that this was because there were “more important clinical priorities taking up appointment slots”. ⁽³⁾



25%
of parents whose children were not up to date with the MMR vaccine reported that this was solely due to logistical reasons

However, a different story was told by parents who live in the borough. In response to our survey, one quarter of parents whose children were not up to date with the MMR vaccine reported that this was solely due to logistical reasons, including timing of appointments, cost of travel, challenges to childcare or their child being ill on the day of the appointment. ⁽³⁾ A similar outcome was seen in response to the NHS SWL Childhood Vaccine Hesitancy survey. ⁽⁸⁰⁾ Of the 136 parents in Wandsworth who reported that their children had not received vaccinations when they were due, over one-third said that this was because they didn't find it easy to book their child's vaccination appointments. This was the most common reason that parents had not provided vaccination to their children. ⁽⁵³⁾

Even when faced with a measles outbreak in the borough in 2019, some parents were unable to access a vaccination appointment to protect their children from measles. One partner told us -

“ I spoke to a parent who came to one of the clinics and they said we've been told that there's a measles outbreak and I've tried and tried to get an appointment with my GP to get my child vaccinated, and they've said they're unable to provide an appointment until February next year. And so there was a real sense of fear amongst people not being able to get that appointment. ”

Vaccine Delivery Partner ⁽³⁾

The partner continued to explain that when they approached the identified GP practices, they were told that the practices were unable to deliver additional appointments due to wider pressures at that time.

“ And then on the converse, when I spoke to practices that were mentioned where they didn't have appointments, I spoke to the practise managers [and] they would tell me - It's winter. We're under significant pressure. I haven't had a practise nurse in post and there's no locum staff that I can draw on to deliver these vaccinations. So you hear it from both sides, don't you? ”

Vaccine Delivery Partner ⁽³⁾

To support parents to access vaccine appointments in a way that is convenient, it was suggested that GP practices could provide more flexible appointments. This may include offering appointments after school or work hours, or during the weekend. However, it can be challenging for GPs to deliver this flexible offering when faced with wider pressures and capacity demands. In addition, even when practices in the borough have historically provided flexible vaccination appointments, these have not always received good uptake from parents. ⁽³⁾ For example, partners highlighted that these sessions have historically received a high number of Do Not Attends (DNAs). This indicates that there is a need to consider alternative approaches to vaccination delivery which can support parents to vaccinate their children.

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4. Capacity, resources and incentives to deliver vaccination and improve uptake

When provided with the right tools, most parents will climb the mountain and vaccinate their children. However, some parents may find it more difficult to make the journey by themselves. Immunisation providers can offer more targeted and supportive tools to these parents – like a hoist – to get them to the top.

Alongside the delivery of vaccinations, GPs carry out additional work to help encourage non or partially-vaccinated children to be fully vaccinated. This uptake improvement work may include identifying eligible children that have not been vaccinated and inviting these children into the surgery to receive vaccination. If a parent is hesitant about vaccination, this may also entail a conversation to encourage the parent to vaccinate their child.

The two main interventions carried out in GP practices to improve vaccine uptake are Call and Recall and Making Every Contact Count (MECC).

CALL AND RECALL: the process of regularly inviting eligible children for vaccination. As a GP staff member explained -

“Normally they get a letter, a text message and a phone call. If either they haven’t booked during that time or they’ve declined, our practice nurse will phone and just discuss their reasons for not booking. Sometimes they just haven’t got around to it. Sometimes they’re doing a bit more research. Sometimes the child’s ill and they just don’t want it at the moment... If they admit to having any clinical questions, as in they think it’s unsafe? Or what are the risks? It will then go to the senior partner and he’ll call them for a more clinical discussion.” ⁽⁴⁸⁾

MAKING EVERY CONTACT COUNT (MECC) an approach which encourages health and social care staff to use opportunities during routine interactions with parents to support them to make an informed choice about childhood vaccinations.

Our GP survey confirmed that the majority of local practices are engaged with delivering vaccine uptake improvement interventions. Of the fourteen GP practices that responded to our survey in Wandsworth, thirteen said that they carry out call and recall, and most carry this out through a mixture of text messages, phone calls and letters. Ten practices told us that they have a vaccination MECC system in place. ⁽⁴⁸⁾ Practices felt that these interventions were working well. One GP staff member told us that they “have an excellent reminder system which parents comment as being super helpful.” ⁽⁴⁸⁾

However, uptake improvement interventions do not always translate into improved vaccination rates. Partners told us that “GP practices put in a lot of work” but recognised that “they just can’t get the patients.” ⁽³⁾

“ We have appropriate systems in place and sufficient nurse appointments for administering MMR vaccines. The biggest challenge is parents declining the vaccine. ”

GP practice staff member ⁽⁴⁸⁾

There were differing views as to why GP interventions do not necessarily deliver the improvements in vaccine uptake as anticipated. GPs told us that their efforts were limited by parental vaccine hesitancy, which they felt remained a crucial blocker that could not always be overcome. ⁽⁴⁸⁾ Yet, other partners highlighted factors rooted within the practice that could limit the effectiveness of these interventions. GP practices face enormous pressures and stresses which may limit the availability and capacity of staff to deliver uptake improvement work effectively. In the context of these pressures, it can be easy for ‘proactive’ work, such as uptake improvement, to be deprioritised and pushed off the agenda by more ‘reactive’ work, such as winter pressures. Partners also reported that some practices may not have sufficient staff to deliver uptake improvement work.

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For example, immunisation providers highlighted that there is a fast turnover of administrative GP staff, which often have responsibility for delivering this work. ⁽³⁾ Even when there is staff available to deliver uptake improvement, parents may not perceive this to be the case. Many parents told us that they would not turn to their GP if they had questions about vaccination because they presumed that they would not be able to get an appointment. ⁽⁷⁸⁾

Practices may also be limited by the capability of staff to carry out this work. Uptake improvement work may involve trying to engage and encourage parents who are hesitant or anti-vaccination to provide vaccines to their child. For these conversations to be effective and to convince parents to vaccinate their children, staff must be knowledgeable about vaccination, its benefits and myths, and capable of having potentially challenging discussions with parents. This may require providing training to staff. For example, SAIS providers told us that they are providing empathetic refutational training to staff to support them to have conversations with parents through their call centre - [read more about this on page 58](#). However, if uptake improvement work is carried out by staff members with high turnover, such as administrative staff, it can be harder for practices to justify providing repeated training.

“ These are potentially difficult conversations, aren’t they? And if you just go – I don’t know – it doesn’t really inspire confidence in someone who’s not really very motivated or very interested. It’s not going to really change your mind. ”

Vaccine Delivery Partner ⁽³⁾

Childhood vaccine (dis)incentive scheme

Practices are incentivised to achieve specified levels of vaccination coverage through incentive payments as part of their General Medical Services Contract. However, current targets are set between 90% and 95%, which practices told us is “quite difficult” to achieve because of vaccine decliners and population mobility, as well as data accuracy issues read - [more about this on page 47](#). ⁽⁴⁸⁾

“ There’s no way to remove anyone from the target group, so... if they decline and they’re adamant ‘I never want it’, they stay in the target group. So it’s quite difficult to achieve the... target. ”

GP Practice Staff Member ⁽⁴⁸⁾

Resultantly, the current incentive scheme may actually work to disincentive some partners from improving vaccination rates. This is particularly true given GP practices face multiple competing priorities.

Our engagement also showed that the incentive scheme may add to some parents’ mistrust of vaccinations. Some parents feel concerned that GPs may not have their child’s best interests in mind when promoting vaccination, as they feel that their primary purpose is to receive an incentive payment and gain financial profit.

“ I’m now questioning all vaccines and doing my own research to ensure all offers are in the best interests of child/person and not just for pharmaceutical and healthcare staff profits/income. I understand GPs were paid per vaccine given - disgrace! ”

Parent ⁽⁵³⁾

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5. Engaging schools to support the childhood vaccination programme

Like vaccine delivery partners, schools also have an essential role to support parents and their children to reach the top of the mountain.

SAIS providers are commissioned by NHS England (NHSE) to deliver school-based immunisation programmes, including the HPV vaccination programme. Schools support vaccination programmes by hosting the SAIS team and helping them to deliver the programme, for example by providing time in the school timetable for vaccination, reminding staff and pupils about the date of the session, sharing information and consent forms with parents or carers, and providing a list of eligible pupils and their parent or carer's contact details to the SAIS team. ⁽⁸⁶⁾

The success of school-based immunisation programmes such as HPV vaccination is therefore dependent on a close working relationship between local authority, schools, school nurses and SAIS teams. Hounslow and Richmond Community Healthcare (HRCH), the local SAIS provider, told us that most schools in the borough are proactively engaged with SAIS and "would move mountains" to help ensure the successful delivery of vaccination programmes. For example, they told us that there are some schools that will "make sure every single parent returns a consent form." ⁽³⁾

“Some people would move mountains for you.”
SAIS Representative ⁽³⁾

However, SAIS reported that there are some schools that "don't want to entertain [them]" because they "don't see [vaccination programmes] as a priority for them or their school". ⁽³⁾ This may be because the school is experiencing competing priorities, or because staff do not recognise the importance of vaccination. In some instances, they highlighted that this can be directed by one individual within the school who is resistant to vaccination.



A representative from SAIS told us that they had "been in and out of many schools for a couple of years now, and you'll hear these throwaway comments - Oh, it's just flu. Don't believe in it myself. You know, some schools don't want you in to do HPV. They'll accommodate you, but you'll have the person who's the link person to work with the immunisation team and they'll have their own views on vaccination. So I think it's down to the luck of the draw of who you have working with you." ⁽³⁾

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SAIS highlighted that the challenge of engaging schools is greatest in Wandsworth compared to other South West London boroughs. They reported that there are some schools in the borough that have not engaged with vaccination programmes for a number of years. SAIS felt that they had “exhausted all options as providers” to encourage uptake in these schools, and reported that it felt like there was “a repeated cycle of not really getting anywhere”.⁽³⁾

“ [We have] exhausted all options as providers. ”
SAIS Representative⁽³⁾

Engaging schools to support the delivery of the HPV vaccination programme can be critical to its success. An engaged school is more likely to encourage pupils to uptake the offer, for example by delivering information sessions, and to support programme delivery by providing a list of eligible pupils and their parent or carer’s contact details. Parents also feel reliant on schools to receive information and communications about HPV vaccination. When asked where they would look for information about the HPV vaccination programme, a parent told us that they “assume[d] that the school would let me know. But if I’m supposed to get it done then I’m completely clueless about that, so I wouldn’t have known.”⁽⁷⁸⁾ The extent to which a school supports the programme can therefore strongly influence the number of pupils that uptake the vaccination offer. In recognition of this, SAIS hold a yearly engagement meeting with schools to provide an overview of the programme and its importance, and advise on how schools can offer support.



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6. The COVID-19 Pandemic

The mountain is not a static entity. Each year the mountain grows taller as increasing numbers of children do not receive vaccination. Whilst some of this evolution is expected, sometimes an avalanche hits that fundamentally alters the mountain's terrain.

The emergence of the COVID-19 pandemic in 2020 reshaped the terrain in ways that were not expected. Whilst the pandemic caused immediate disruption to the delivery and uptake of vaccinations, the unexpected cost was to public confidence in vaccination.

Delivery and uptake of vaccinations

Throughout the COVID-19 pandemic, GPs continued to offer routine childhood immunisations as an essential service. Most local GPs reported that they were able to continue delivering the MMR vaccine according to the routine immunisation schedule. ⁽⁷⁵⁾ Whilst the vaccine offer continued as normal, some parents felt reluctant to bring their children into GP settings over this period. Compared to the immediate and highly publicised risks of COVID-19, the risk of catching a VPD such as measles, mumps, or rubella may have seemed minimal to many parents.

“ A lot of practices always had an open-door policy during COVID. But I think that parents often feared going in because of the pandemic, and obviously bringing their children in can be quite risky. So I think that was a fear of going in, even though practices were constantly telling parents, we're open, we always have an open door for you. ”

Vaccine Delivery Partner ⁽³⁾

As a result, complacency increased, and uptake of the MMR vaccine declined. During the height of the pandemic (March 2020 - September 2021), the proportion of children aged two that received one dose of the MMR vaccine in Wandsworth reduced by around two percentage points. Recovery was first seen among cohorts of children who became eligible for their first MMR vaccine after October 2021, and the proportion of vaccinated children has since shown an increasing trend up until the latest reporting period. This indicates that, during the height of the COVID-19 pandemic, approximately 120 children above average in Wandsworth did not receive their first MMR vaccination. ^(87,88,89,90) Due to data reporting lags, the impact of the COVID-19 pandemic on uptake of the second dose of the MMR vaccine is yet to be determined.

By contrast, delivery of the HPV vaccine was significantly affected by the COVID-19 pandemic. During the 2019/20 academic year, SAIS providers had just begun delivery of the HPV programme when the COVID-19 pandemic took hold and pupils were sent home from schools. SAIS teams had almost finished delivering the second dose of HPV vaccination to girls and had just started delivering the first dose to both girls and boys, when they had to suspend programme delivery in Wandsworth. As a result, over 1,300 girls and over 1,200 boys in the borough missed out on their first dose of vaccination during this year. ⁽⁴¹⁾ This means that around 2,500 young people in Wandsworth required catch-up vaccination once programme delivery could resume.

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Case study of good practice

“We were challenged immensely”⁽³⁾ - Catching up on missed HPV vaccinations after the COVID-19 pandemic

Around 2,500 pupils in Wandsworth did not receive their HPV vaccine in 2020 due to lockdown, and required catch up vaccination in 2021.

When schools moved towards a ‘business as usual’ operation in 2020/21, SAIS teams faced “enormous” delivery pressures as they had to co-deliver their usual programme of vaccinations alongside a large-scale catch-up operation.⁽³⁾ Additional factors heightened this pressure. For example, in 2020/21 SAIS were commissioned to deliver COVID-19 vaccination to all children aged 12 to 15 years, as well as influenza vaccination to all children in secondary schools. It also became more challenging to persuade schools to engage with the programme in the post-COVID period, as many felt vaccination to be a lesser priority at this time.

Against these odds, SAIS providers managed to deliver. In the aftermath of the pandemic, a high number of young people received HPV vaccination. In 2020/21, the proportion of girls that received their first dose of HPV vaccination was similar to before the pandemic, and in the following year the proportion that proceeded to receive their second dose was only slightly lower than previously.⁽⁴²⁾

“ We caught up, we delivered what we could over two years. It was an immense pressure. We did get funding for additional staff. But having to give HPV to years eight, nine and ten... I think the main aim was to go out there and deliver. We didn’t have any time for assemblies and engagement. It was pretty much – we need to deliver this now before young people went off for their summer term again. ”

SAIS Representative⁽³⁾



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Impact on vaccine hesitancy

Whilst the COVID-19 pandemic proved the value, power and possibility of vaccines, it simultaneously made vaccine hesitancy and the anti-vaccination movement more popular than ever. Uncertainty about the course of pandemic and the government's response, as well as the rapid production of new vaccines, dented public confidence. It also prompted an explosion of misinformation about vaccines that was rapidly spread and widely amplified through social media platforms. ^(91,92)

It is too early to assess if public confidence has led to a reduction in rates of MMR vaccination in the borough due to reporting delays. However, there are some early indications that the pandemic has had more long-term impacts on uptake of the HPV vaccination. In 2021/22 the proportion of girls who received their first dose of the HPV vaccine was approximately 23 percentage points lower than average in the years prior to the COVID-19 pandemic. The proportion of boys that received their first dose in this year also declined by approximately fifteen percentage points compared to the previous year. Although a downward trend was also observed in London, the reduction was not as large in Wandsworth. ⁽⁴²⁾ These early warning signs need to be monitored, and may require targeted action to address if the trend persists.

Vaccine delivery partners also reported anecdotal evidence that vaccine hesitancy had increased locally since the COVID-19 pandemic. For example, partners reported that "a lot of parents are just vaccinated out" after the pandemic. ⁽³⁾ They also highlighted that parents are more sceptical about which vaccine their child is being provided, with particular concern that they are being given a COVID-19 vaccination –

“ That query, when you're talking to parents, is it the COVID vaccine you're giving, and that suspicion and that lack of trust – we don't want any vaccines. ”

SAIS Representative ⁽³⁾



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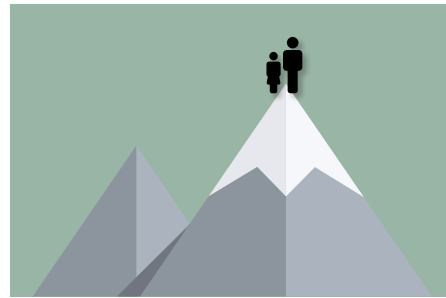
7. Accuracy of vaccine data

BUT - do we actually know what the mountain looks like? And do we really know where a parent and a child is on their journey up the mountain?

Studies and local investigations have shown that there are data inaccuracies within the NHS record system. Whilst data may tell us that a child has not begun their journey, in reality they may have reached the top years ago.



Data tells us that you are yet to climb the mountain



In reality, you've already reached the top of the mountain

This inaccuracy has implications on our ability to understand the scale of the unvaccinated population.

Inaccurate coding of vaccination records

When a child receives a vaccine at their GP practice, this is electronically recorded in their GP record, the Child Health Information Service (CHIS) and in their personal child health record – their 'red book'. Information is entered into the GP record through a clinical code, which provides a standard language for healthcare IT systems. This means if someone conducted a search they could pull up a record of whether someone had been vaccinated.

Vaccination data is often coded inaccurately. One cause is that children are often coded as 'Not Fully Vaccinated' for reasons that are not associated with their vaccination. For example, the vaccination status of migrant children is often inaccurate because they have registered from abroad and their vaccination history does not align with the UK schedule. ⁽⁹³⁾ [Read more about this on the following page.](#)

As a result of these inaccuracies, vaccine reporting typically underestimates the number of children that have actually received vaccination. One study found that among children in London aged 10-16 years with no record of MMR vaccination, 60% were in fact vaccinated. ⁽⁹⁴⁾ This challenge was confirmed locally within a data cleaning project carried out by partners at NHS SWL, which found that 50% of GP practices in the neighbouring borough had large numbers of incorrect codes in their GP practice records – [you can read more about this on page 61](#). When we spoke with GPs in Wandsworth, half of practices reported that their vaccine records were inaccurate, or they were not sure whether they were accurate or not. ⁽⁷⁵⁾

Inaccurate coding of vaccinations creates two major challenges within the vaccine delivery system. Firstly, without an accurate record of who has and hasn't received vaccination, GP practices struggle to identify cohorts that are due or overdue their vaccinations when delivering catch up vaccination. Secondly, it means that reported borough uptake rates do not provide a reliable measure of true vaccine coverage in the borough. This prevents accurate monitoring of local vaccination and disease susceptibility rates in the borough, and makes it challenging for system partners to make informed, evidence-based decisions about how to deliver the vaccination programme more effectively.

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Vaccination status of migrant children

Vaccine delivery partners reported that the vaccination status of migrant children is commonly coded inaccurately. This is because GP practices are unable to record vaccination status without proof of vaccination, which migrant children may not have in their possession. Even if they do have their vaccine records, the GP may be unable to read or translate this to be recorded on the GP system. In the absence of this record, the GP practice must assume the child is unvaccinated and record the child as 'Not Fully Vaccinated'.

Practices will offer to vaccinate children with 'missed' vaccinations to ensure that they are up to date in accordance with the UK immunisation schedule. Some parents are happy for their children to be vaccinated again. One parent we spoke to told us that they had recently moved to the UK from another country. As their child's vaccination record did not provide proof that their child had received the second dose of the MMR vaccine, the GP practice repeated their vaccination. The parent told us it was a very positive experience for them and that there was "nothing" that could have improved this process for them. ⁽⁷⁸⁾

“ When patients come in and say they have been fully vaccinated... can we not take their word for it? ... If someone comes from Columbia and says my child's been fully vaccinated, could we not record that down? ... We're not going to have a red book, and we're not going to have all their documents. ”

Vaccine Delivery Partner ⁽³⁾

However, some parents may be reluctant to re-vaccinate their child. If the parent decides not to re-vaccinate their child, they will remain coded as 'Not Fully Vaccinated' on their patient records. As a result, vaccine coverage rates reported by the practice will be lower than they really are. For practices, this may prevent them from achieving the target vaccination levels required to receive an incentive payment, and therefore disincentive them from putting in additional work. At a systems level, this also makes it challenging to accurately monitor the scale of unvaccinated children in the borough.



Source: GOV.UK

“ Some of those practices that haven't done as well have worked ten times harder than other practices, but they just don't get the same outcomes because of the population that they're dealing with... [Named GP practice] - a lot of their patients are asylum seekers at the [hotel] down the road. They have no records. They know that they've vaccinated their children. And why should they re-vaccinate them to tick a box for a GP practice to get money or to fill their quota, because they have no records that say [they are vaccinated]. And that is the challenge that we are in. You can't exclude them. ”

Vaccine Delivery Partner ⁽³⁾

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Population mobility

Another challenge identified to maintaining accurate patient records is population mobility. This challenge is greatest in London which has the highest rates of population mobility in England, and this has seen a growing trend over the past two years. ⁽⁹⁵⁾ Mobility was noted as being particular high in Wandsworth. ⁽³⁾

“You tend not to have the data that you want to have in a timely manner.”
Vaccine Delivery Partner ⁽³⁾

One reason that population mobility impedes data accuracy is that when a patient moves into a new area and changes their GP, their health records may not be immediately updated on their new practice's IT system. Partners noted that this means that “you tend not to have the data that you want to have in a timely manner.” ⁽³⁾ A 2007 study into childhood vaccinations found that children who lived in families that moved frequently or during pregnancy were more likely to miss vaccinations. ⁽⁹⁶⁾

Population mobility may also impact patient records because, if a person moves out of the area but does not notify their GP, they may incorrectly remain on the practice record as a ‘ghost patient’. Ghost patients may inflate the number of patients that appear eligible for vaccination, and in turn make reported uptake appear lower than it really is. Although practices should regularly monitor records to remove ghost patients, they may not feel incentivised to do this because funding is provided per registered patient.

“Not always we have the most updated data which perhaps is a challenge as well to identify the correct cohort and if we have to reach out to them... And even the live data, if we want to do the searches to tap into these cohorts, it's not always live and it's not always cleansed as well.”

Vaccine Delivery Partner ⁽³⁾

Inaccurate patient records

Data inaccuracies have also been identified within records of children that are eligible for vaccination. For example, SAIS providers reported that parental contact details are often incorrect. This creates a barrier for vaccine delivery partners to identify, notify and recall children who are due or overdue receipt of their vaccinations. They explained the scale of this challenge when delivering a recent vaccination campaign –

“I had a class list from a ... primary school and I think there would have been 700 to 900 contacts on it, and we wanted to send a text message with the link for the consent form so the children, so the parents, can either say yes or no to a flu vaccine. And so many of those numbers were invalid. And this was provided by the school... So if the school data is not accurate. You know that that's a big issue and you kind of feel helpless in a situation like that because, what, one quarter of the contents were accurate? That's a big red flag.”

SAIS Representative ⁽³⁾

We also heard that demographic information, particularly ethnicity, is commonly not recorded on a child's record. This can make it challenging for partners to understand which population groups are less likely to have been vaccinated, and in turn more susceptible to diseases. As highlighted previously in this section, not having this data is a major barrier to improving the equity of the local vaccination programme.



SECTION THREE

How we will move the mountain: solutions to improve vaccination coverage



The previous section demonstrated that improving childhood vaccination rates is a multi-dimensional challenge, spanning the delivery and uptake of vaccinations, to wider system-level issues. It is a challenge that has persisted for many years, and over this time it has continued to grow and evolve.

Across our engagement, vaccine delivery partners, local parents and young people proposed various ways to improve childhood vaccination rates in Wandsworth. Section three provides an overview of their proposed solutions. It also features case studies of good work already underway to improve local vaccination rates, to celebrate local success and support shared learning.

The report concludes by proposing recommendations for change. These local recommendations have been informed by analysis of local data and the solutions proposed by delivery partners and residents. They are actions to be prioritised and advanced by the local vaccine delivery system.

However, these actions alone will not move the mountain. The work to improve childhood vaccinations cannot solely be advanced by the local vaccine delivery system. Some of the actions required are beyond the local remit and need a collaborative approach with partners working at regional and national levels. Collectively, we must work together to improve childhood vaccination rates.

“ There’s a lot of challenges that are within our control and others that aren’t... We need to focus on what we can achieve within the resources that we have. ”

Vaccine Delivery Partner ⁽³⁾

SECTION THREE

1. Encouraging and empowering parents to make informed decisions about vaccination

The success of the childhood vaccination programme is reliant on public trust in vaccination and the vaccine delivery system. As section two demonstrated, local uptake of vaccinations has been impacted by vaccine hesitancy. However, our parent's survey also provided reasons to be optimistic. Of the 38 parents surveyed whose children were not up to date with MMR vaccination, only three responded that there is nothing that would encourage them to vaccinate their children. ⁽⁵³⁾ This indicates that most parents we spoke to could be encouraged to vaccinate their children.

“Credibility and trust needs to be built back up and earned. I'm afraid I now question everything.”

Parent ⁽⁵³⁾

Whilst it is ultimately down to a parent to decide whether or not to vaccinate their child, the local vaccination system must ensure that parents are well-equipped and informed to make this decision in the child's best interest. This will primarily be done through communications, such as campaigns, information, resources and one to one conversation.

Although partners reflected on the limitations of traditional communications materials, such as posters and leaflets, it was still felt that these remain an important weapon in our arsenal. When we asked GP practice staff what would help to improve uptake of the MMR vaccine at their practice, most proposed improving the availability of communication materials and information

LOCAL RECOMMENDATION

Immunisation providers should explore with parents the reasons for refusal and offer information specific to their concerns. Parents may need time to review the information and so should be followed up shortly after to discuss and offer the vaccination again.

about vaccination. Local parents were also keen to continue receiving communications, particularly via email and text as well as, posters and leaflets at GP surgeries and pharmacies. ⁽⁵³⁾

Communications campaigns

Communication campaigns are an important tool to encourage parents to vaccinate their children. However, with modifications, partners felt that their effectiveness could be enhanced. For example, it was proposed that communication campaigns should directly address vaccine hesitancy and the risks of low vaccine uptake, as well as promoting the “positivity of vaccines and ... [how they] protect the population”. ⁽³⁾ Partners also made proposals about how messages should be delivered in communications. For example, one partner highlighted the approach to promoting the HPV vaccination in Canada – “They come with a very hard-hitting line to parent – your son or daughter is at risk of [...] cancer.” ⁽³⁾

Partners also proposed increasing the scale of childhood vaccination communication campaigns. For example, partners suggested delivering a large media campaign, such as a TV advertisement, to promote the importance of childhood vaccinations. One partner proposed an annual campaign to promote the HPV vaccine - “If we're having an anti-cancer vaccination, why is it not everywhere at a particular time of year, when school age teams across the country are delivering it?” ⁽³⁾ Partners reflected on the success of recent media campaigns to promote other vaccination programmes. For example, the scale of communications to promote the COVID-19 vaccination programme, as well as the success of a recent Shingles vaccination TV advertisement. A GP practice member told us that the advertisement had “encourage[d] quite a lot of people to come forward [for their Shingles vaccines].” ⁽⁴⁸⁾ It was acknowledged that these Communications campaign would be better ‘done once’ and delivered on a national scale.

SECTION THREE

Case study of good practice

Locally, communications campaigns have been mobilised to drive uptake of vaccination programmes. Two examples of local communication campaigns are detailed below.

Catching up after COVID-19

After COVID-19 everyone wanted a catch-up. Vaccination was no exception. Swapping social distancing for socialising has its own risks when it comes to vaccine preventable disease. The measles risk from reduced levels of MMR vaccination during the pandemic saw the launch of a national campaign at the start of February 2022. The campaign warned and reminded parents and carers of children aged zero to five to ensure receipt of two doses of MMR vaccine, prompting those who had forgotten, were complacent or hesitant to consent to vaccination.

Experience from the COVID-19 response tells us that local authorities play a key role in embedding and amplifying messaging across their local communities. A multi-pronged approach was developed to cascade the campaign throughout the communities. This included targeted social media messages on platforms like Mumsnet, and a Press release with the Director of Public Health urging all parents and carers to vaccinate their children.

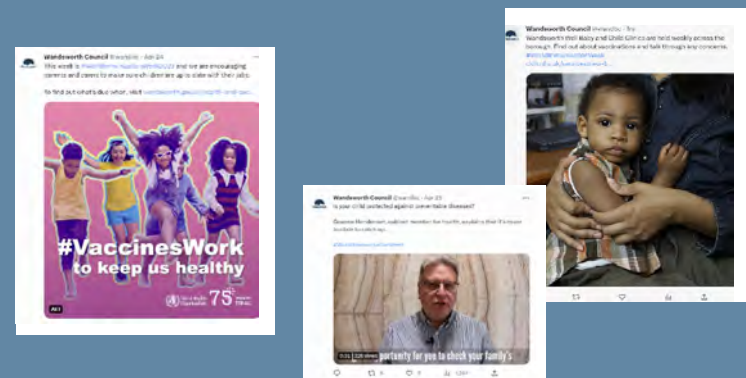
Following the campaign there was an evaluation of local actions to cascade the campaign. The campaign was estimated to have reached just under 33,000 people via the social media advert and around 5,000-6,000 families who received messaging through their child's nursery or Early Years setting.

World Immunisation Week 2023

Between 24th to 30th April 2023, Public Health joined the campaign for World Immunisation Week to help highlight the collective action needed to protect people from VPD and to promote the importance of vaccinations. In South West London, the campaign was focused on childhood immunisations and local events were carried out to promote the childhood immunisations agenda:

COMMUNICATIONS: NHS SWL Immunisation messaging was shared through Council channels including Facebook and Twitter. Councillor Henderson, Cabinet Member for Adult Social Care and Health, did a video to encourage people to take up vaccinations. This was promoted on Instagram and Facebook.

HEALTH VISITOR BABY AND CHILD CLINICS: Clinics were promoted via Council channels, with encouragement for parents to attend and find out information about immunisations.



SECTION THREE

Information and resources

To tackle vaccine hesitancy and improve confidence and trust in vaccination, parents should have access to evidence-based and accurate information about vaccination. We repeatedly heard from local parents that they want access to quality and relevant information. When we asked parents whose children were not up to date with vaccination what would encourage them to vaccinate, the most common response provided was “more information”. Parents particularly wanted to receive information about the vaccine’s “ingredients and side effects” as well as “the conditions being vaccinated against and the risks of those conditions”.⁽⁷⁸⁾

“ I think some people do get nervous... So maybe making it a bit clearer about ... the studies that have been done or whether there’s been any side effect. ” *Parent (78)*

Even parents whose children were up to date with vaccination were keen to receive more information about vaccination. Parents told us that they did not feel fully informed about what vaccinations their child should receive, when these should be received, and whether or not they had been received. Parents were also uncertain about where they should source reliable and accurate information about vaccination. Making it easier for parents to understand what vaccinations are available to their children and when these should be received will empower parents to be more active in their child’s vaccination journey.

“ I’m pretty sure my kids are up to date with their vaccines because I’ve always tried to. But then sometimes I get asked things like - What’s tetanus? Have they been vaccinated against [it]? - I’m not sure they have. But it’s not because I’m an anti that it’s just I don’t know whether they’re meant to be or what they have [received]. ” *Parent (78)*

For the information and resources provided to parents to be effective at improving vaccine confidence, these must address their hesitations about vaccination. Parents were keen to receive information that directly acknowledged and addressed their concerns about vaccination, for example information about potential side effects of the MMR or HPV vaccinations. Concerns about vaccination are very real for some parents, and they want to be provided with information that would reassure them against vaccine myths and provide confidence in vaccination.

“ What are the risks of ... measles, mumps, and rubella versus the vaccine. That wasn’t really kind of presented at any point. So I think that might help to balance things out a bit clearer. And also some of the usual questions like, what if I delay the vaccine to start with or what if I space them out a bit more. ” *Parent (78)*

To ensure that information can be useful to all, materials must be produced and shared in ways that are accessible to local parents. This may involve providing information and resources in various languages and a range of formats, including promoting information via social media, as this is where parents whose children are not up to date are more likely to receive information. (53) Engagement with local parents will equip the system to understand and directly respond to parents’ needs. Some of this work is already underway. Local partners including local authority Public Health and NHS SWL have been engaging local parents through surveys, interviews and focus groups. Through building understanding of local parents’ needs, local partners can develop specific and tailored tools and strategies that are most effective for the population.

LOCAL RECOMMENDATION

Immunisation providers should ensure that parents are provided clear, authoritative, and up-to-date information about the vaccine, including any potential side effects, and the condition the vaccine prevents against. Information should be provided in a range of formats to suit varied needs of parents.

SECTION THREE

One-to-one conversations

The intervention that partners and parents felt had the greatest potential to combat vaccine hesitancy is one-to-one conversations with hesitant parents. Most parents whose children are not up to date with vaccination are not strongly opposed to vaccines, but they might have questions and concerns that they want to be answered. A one-to-one conversation provides these parents with the opportunity to have a personalised conversation that directly addresses their individual concerns about vaccination, including tackling vaccine myths and disinformation. Parents can then be supported to make an informed decision about vaccination.

“Those one-to-one tailored conversations, that’s what’s going to move the mountain.”

Vaccine delivery partner⁽³⁾

One-to-one conversations have a powerful capacity to improve uptake of childhood vaccinations. Studies have shown that advice and recommendations, from healthcare professionals is the most common reason that vaccine hesitant parents change their minds about vaccination. ^(97,98,99) Locally, we heard from SAIS providers about their recent success with the use of a call centre model to deliver an MMR campaign. [Read more about the SAIS call centre on page 56.](#)

“That might be a window to get the discussion going and find out why they’re nervous. Clarify any confusion. Help them understand whatever they’ve read up on, because getting access to all sorts of bizarre information on the web is a common thing that goes against medical advice and the actual evidence. So helping them to understand what is real.”

Parent⁽⁷⁸⁾

The effectiveness of a one-to-one conversation will be determined by how and by whom it is carried out. Whilst an effective interaction can address the concerns of a vaccine hesitant parent and motivate them towards vaccine acceptance, a poor conversation may contribute to rejection of vaccinations and broader health care. Of particular importance is how vaccine hesitancy is addressed during the conversation. Most vaccine hesitant parents will have a complexity of reasons for not vaccinating their children. These reasons will not be dispelled through simple persuasion or provision of additional information. If not acknowledged and addressed correctly, the conversation may backfire, and the parent may be pushed towards further refusal of vaccination.

The individual that carries out this conversation will also influence its effectiveness. Studies have shown that a parent’s trust in the source of information may be more important than what is in the conversation. ^(100,101) Whilst some parents might be more responsive to having this conversation with a health professional, such as their GP or a GP nurse, others would be more responsive to an individual outside of the healthcare system. One partner explained why a healthcare professional might not be the most suitable person to carry out this conversation for some parents - “If I’m hesitant about vaccination I’m not going to listen to my GP at all. But I might listen to somebody who’s not in my practice... because I would think to myself, you’re coming at it from a different perspective. You’re not coming at it because you want to meet your QOF [Quality and Outcomes Framework] targets or whatever targets. So I will look at it in that way.” ⁽³⁾

SECTION THREE

“ We have so many pillars in the community. How can we use them to talk about immunisation in a positive way. ”
Vaccine Delivery Partner ⁽³⁾

Partners suggested various individuals within the community that might be more suited to engaging in a conversation about vaccination for some parents. For example, it was suggested that health visitors could spend additional time with parents identified as vaccine hesitant to discuss their concerns and provide necessary reassurance. Community pharmacy teams were also identified as being well placed to support vaccine conversations because they are “always people from the local community, who have been brought up there, who know the families who come in and out of our pharmacies.” We heard about a pilot project that recently launched in South East London to utilise community pharmacy staff to have conversations with parents about vaccination. Other community influencers noted were staff working in pre- and post- school clubs, as well as the child minders. ⁽³⁾

LOCAL RECOMMENDATION

Immunisation providers should consider if there are other staff in the healthcare system who can actively have detailed discussions with parents about vaccination. This may include trained call centre staff and community pharmacists, amongst others. Staff should be trained so that they are equipped to have effective conversations with parents.



SECTION THREE

Case study of good practice

SAIS providers: engaging parents who have not vaccinated their children.

In May 2023, NHSE London launched an MMR and Polio catch up campaign for children aged one to 11 who were not up to date with their vaccinations. Children were offered catch up vaccination through primary schools and community clinics. To support the campaign, SAIS providers adopted a call centre model and contacted families whose children were not up to date with MMR or Polio vaccinations to have a conversation about vaccination. This conversation provided an opportunity for parents who were hesitant about consenting to vaccinations to discuss their concerns.

A representative from SAIS told us that “what has made it so successful is ... the type of staff that we have working on it.” Alongside strong knowledge of vaccines, SAIS told us that “these are the BA cabin crew that have fantastic customer service skills.” We heard how staff probe and challenged parents’ concerns using “myth busting techniques... that they can roll of their tongue very quickly that will challenge [vaccine myths] in a very nice way.” (3) They told us that the call centre model received “really good feedback from parents” and was so successful that it has now been extended across the SAIS programme. (3) For example, we heard how it will be used to deliver HPV catch up in 2024 to any young people that have missed their vaccination.

To further improve the capacity of staff in the call centre, SAIS told us that they are hoping to provide staff with empathetic refutational* training. They explained to us the benefit of this training to holding vaccination conversations.

“ It’s essentially about – when you’re having that conversation to offer a vaccination... that you are eliciting the concerns that you’re hearing and that you’re acknowledging – yes, that’s correct... so it’s getting the team skilled in having those phone conversations where you’re not killing it straight away and you’ve lost that opportunity and ... [you] are unlikely to get them back. ”

SAIS Representative ⁽³⁾

* Refutational training is a training on how to respond to people who have refused vaccination in a manner that is empathetic to the person’s perspectives

SECTION THREE

Respecting the parents' decision

Once a parent has decided whether they will or will not vaccinate their child, partners emphasised that this decision must be acknowledged, respected, and supported by the system. Partners told us that when this decision is not respected, parents can feel overwhelmed and pressured. This may lead them to backtrack further into their opposition to vaccination. As one GP practice staff member explained - "I think patients often feel that we're pressuring them into making a decision and therefore just sort of say no, because that will make us stop."⁽⁴⁸⁾ Conversely, vaccine delivery partners felt that respecting a parent's choice not to vaccinate may actually increase the long-term likelihood that the child receives vaccination. As explained by a vaccine delivery partner - "If they don't feel so harassed, what happens is, is that they hear of something through a friend where somebody got something and then they're more likely to host. Or that person reaches an age and makes their own mind up. And we've got loads of pre-university students coming along for their MMR and HPV because they've made their own decision."⁽³⁾

“ We have to empower parents to make a choice and support them in that choice. ”

Vaccine Delivery Partner⁽³⁾

“ Even if they don't take a vaccine, what can you do to minimise your risk? ”

Parent⁽⁷⁸⁾

The system must support parents with whichever decision is made about vaccination, even if the decision is made not to vaccinate. Parents told us that they wanted to be able to engage in a more open dialogue and conversation about vaccinations with GP practice staff, even if they indicated concerns about vaccination or made the decision not to vaccinate. For example, some parents told us that they wanted the vaccine delivery system to offer support and mitigations so that they could provide vaccinations to their children in a way that they felt more comfortable with, such as by spacing out vaccines. Or, if they had decided not to have the vaccine, they wanted support and guidance around how they can protect their children against VPD in other ways.⁽⁷⁸⁾

LOCAL RECOMMENDATION

Immunisation providers should consider implementing a pathway for parents who either refused to and/or cannot vaccinate their children, such as vaccine counselling appointments and advice to mitigate the risks of not vaccinating.

SECTION THREE

2. Enhancing the vaccine delivery system

The local vaccine delivery system must be equipped to deliver vaccinations to all children and young people and encourage as much uptake of these vaccinations as possible. There is already an abundance of work underway in the borough to achieve this. For example, almost all GP practices in the borough that we surveyed said that they carry out call and recall, and most had an immunisation MECC system in place. ⁽⁷⁵⁾ However, partners proposed additional actions that could be taken to further enhance the local vaccine delivery system.

For example, some parents may require more support to access vaccine appointments that are convenient for them. It has been suggested that GP practices offer appointments after school or work hours, or during the weekend. However, we also heard that it can be challenging for GPs to offer more flexible appointments from a staff capacity perspective, especially when these sessions receive a high rate of DNAs. ⁽³⁾ This indicates that there is a need to consider alternative approaches to vaccination delivery which support parents to vaccinate their children.

“ Empower them to be able to have these conversations, especially with MMR being such a difficult [subject]. ”
Vaccine Delivery Partner ⁽³⁾

Partners also told us that there was additional work that could be undertaken in GP practices to upskill wider practice staff to have MECC conversations with parents. It was acknowledged that it can be challenging for staff to have conversations about vaccination with parents, especially the MMR vaccine. Given the potential impact that this conversation may have on a child's vaccination status, it is crucial that it is carried out effectively. Staff must be empowered and equipped through training to effectively hold difficult conversations about vaccination with parents.

ⁱⁱⁱ ImmForm is a UKHSA website used to collect data on vaccine uptake for immunisation programmes and to provide vaccine ordering facilities for the national immunisation programme and for some products used for urgent treatments

However, partners also acknowledged that the system “need to think outside primary care, because they're so busy.” ⁽³⁾ GP practices face immense pressures and cannot solely carry forward the baton to improve uptake of childhood vaccinations. Various adaptations were proposed to help address the burden on GP practices, for example the development of a centralised call/ recall resource that is specialised and trained to carry out conversations about vaccinations with parents.

“ There is an opportunity with pharmacists who are open longer hours to do things, to give people choices. Because families, if they're close to a pharmacy and get to know them, they have a relationship with them... [and] pharmacists seem to be at the moment much more stable [than GPs]. ”
Vaccine Delivery Partner ⁽³⁾

Partners at our focus group as well as the NHS SWL MMR Hackathon proposed increasing the role of community pharmacists in the vaccine delivery system. It was suggested that pharmacies may have a role in promoting childhood vaccinations, as well as supporting delivery of the programme. ⁽³⁾ Partners acknowledged that community pharmacies are well placed to enhance vaccination delivery, and in particular to improve accessibility for particular groups of parents, because they are open longer hours and have deeper ties to the local community. Partners reported that the greatest barrier preventing pharmacies from involvement in delivery of childhood vaccines is the NHS England contract with ImmFormⁱⁱⁱ, which does not allow for vaccine delivery to community pharmacy settings. ⁽³⁾

LOCAL RECOMMENDATION

Parents who do not attend appointments should be contacted by their GP and asked their reason for non-attendance. Parents should then be asked what time would be convenient to attend an appointment.

SECTION THREE

Health Visitors

We also heard about potential opportunities to expand the role of health visitors. Health visitors have played an important role in routine childhood vaccination programmes since their introduction, and historically this has included involvement of the delivery of vaccines. Whilst the role of health visitors in childhood vaccinations has since evolved, they continue to form a key link with parents. Vaccinations are a core component of a health visitors' universal offering. Health visitors will share and discuss information on vaccinations with parents, and have a protocol in place with GPs to follow up parents whose children are more than six months behind in their immunisation schedule, and actively encourage take up.

However, a report by PHE indicated that there has been a steep decline in health visitors discussing immunisations with parents over time. They indicated that this was due to time constraints on the service offering and the movement of vaccinations into primary care.⁽¹⁰²⁾ This has meant that parents are less likely to identify health visitors as a point of contact to discuss their children's routine vaccinations. Our survey revealed that only 30% of parents would speak to their health visitor if they had questions or concerns about their child's vaccinations.⁽⁵³⁾

Their contact with families and ability to build trusting relationships means that health visitors are well placed to encourage vaccine uptake and address vaccine hesitancy. Studies have shown that health visitors are more likely to take a parent-centred approach when providing information to parents, which may support parents to navigate the complexities surrounding vaccination decisions.⁽¹⁰³⁾ When provided the time and resources to provide more rigorous interventions, the benefits of health visiting are stark. The Family Nurse Partnership (FNP) is a targeted programme that delivers an intensive nursing care package for first-time young parents in Wandsworth. Children graduating from the FNP at age two years in 2021 had 100% uptake of childhood vaccinations. This indicates the potential for health visitors to have significant impact on childhood vaccinations.



SECTION THREE

3. Improving local vaccination data

However, the effectiveness of enhancing the local vaccine delivery system will be limited unless improvements are made to the accuracy of vaccination data. Investigations by NHS SWL colleagues have shown that recorded local vaccination data typically underestimates the number of children that have received vaccination in the borough.⁽⁹³⁾ At present, we do not have an accurate understanding of the scale of the unvaccinated population in the borough. Without accurate intelligence on this population, the system is unable to complete effective vaccine uptake improvement work and develop reliable outbreak management plans. This may present a massive risk to residents.

NHS SWL is already leading work in the borough to correct and improve the accuracy of vaccination data in GP records. But partners also proposed the need for bigger, system level improvements to vaccine data. For example, one partner proposed the need for a “central data source [that we can] put everything in, so everything’s automated.” They told us that this would “make everything so much easier. And coding issues [would] disappear.”⁽³⁾

LOCAL RECOMMENDATION

GP practices should regularly review their records to understand their progress with vaccine uptake and identify any data errors within their records. Immunisation providers should also consider offering refresher sessions for staff on best practice for coding information.

Another key gap identified is demographic data on children that have not received information. Literature indicates that there are groups in the borough that will be less likely than others to receive vaccination.⁽⁴⁵⁾ However, these trends can often be locally specific, and without local data the system is unable to accurately identify low uptake groups specific to the borough. Without this intelligence, partners are limited in their ability to reduce vaccine inequalities in the borough.

“[We need a] central data source [that we can] put everything in, so everything’s automated.”
Vaccine Delivery Partner⁽³⁾

LOCAL RECOMMENDATION

GP practices should identify if there are any particular demographic groups on their practice lists who have low uptake of vaccination. If so, seek support from local stakeholders, such as the local authority on how these communities can be better served.

SECTION THREE

Case study of good practice

NHS SWL ICB: Improving local vaccine data quality

In 2022, NHS SWL ICB deployed local Immunisation Coordinators at GP practices in a neighbouring borough for a pilot project to improve vaccine data quality. The project confirmed concerns that local vaccine data quality was poor. The Immunisation Coordinators identified that more than 50% of GP practices had a large number of incorrect codes. They also found that GP practices had limited understanding of the issues surrounding inaccurate data coding. ⁽³⁾

To support improvements to local data quality, the Immunisation Coordinators provided a package of support to GP practices. This included support to identify and rectify incorrect codes on GP records, and help to understand why they might have low uptake of vaccinations. Supported GP practices saw on average a 30% increase in their coverage relative to GP childhood vaccination targets, confirming that reported data had been underestimating real levels of vaccine uptake in the local area. It also confirmed that data cleansing exercises had the potential to improve reported rates, and provide a more accurate picture of how many local children are missing vaccinations. This will allow efforts to be focused on supporting those families that require most help.

Following the success of the pilot project, the Immunisation Coordinators have been deployed to GP practices in Wandsworth.

“It’s nice to see you face to face, it allows us to have a productive conversation on how we can improve our processes.”

GP Practice Staff Member ⁽⁷⁵⁾

South West London Integrated Care Board (SWL ICB) MMR Focus Group

To improve understanding of parent’s views towards vaccination, in 2023 NHS SWL ran a focus group with parents from Black African or Black Caribbean communities whose children had not received the MMR vaccine. The focus group aimed to understand parent’s thoughts on the MMR vaccine, their reasons for not vaccinating their children, and what information would help them to make an informed decision about vaccination. The discussion was joined by a local healthcare professional who could answer parents’ questions about vaccination.

The focus group was attended by parents who were of Black African and/or Black Caribbean heritage. Discussions revealed that:

- Half of parents reported that their children had received some of their childhood vaccinations.
- The majority of parents expressed concerns about the link between the MMR vaccine and autism. Although they were aware of statements confirming there was no link, they felt that they had been given no evidence to prove this.
- Many parents were concerned about side effects post-vaccination, particularly about loss of speech. This was most discussed within the Somali community.
- Parents felt that they would be able to make an informed choice if they received more access to research, data and clear evidence. They also suggested it would be helpful to hear from a parent whose child had received the MMR vaccine, and to be provided with reassurance that side effects are normal.

SECTION THREE

4. Collaboration across the vaccine delivery system

The local vaccine delivery system is complex and involves multiple partners working collectively to plan and deliver vaccinations – see **Appendix** for an overview of the local vaccine delivery system. Partnership working is therefore essential to help improve uptake and reduce health-related inequalities within the local community.

Collaborative work to improve vaccination rates is underway in multiple forms. It includes the collaborative work between agencies working across different parts of the vaccination system within the borough. It also includes work with delivery partners working outside of the borough to share learning and examples of best practice. For example, a vaccine delivery partner highlighted the 2019 measles outbreak response as “one of the best collaborative pieces of work or interventions I’ve done.”⁽³⁾

Partnership working was reflected on as a success by local partners, and as something that had improved over recent years in the borough.

“ I think that we work much better together as organisations. There’s less barriers. I know that I could phone up [name] and get his advice on something and we could work something out that might help each other going forward. And that’s what we’ve done and that’s what we’ve learnt over the last few years. It’s not about the contracts and who gets the money, it’s about how you can work together and get a good decision. And we did that in COVID. We all worked together and pushed together because there was a national emergency. ”

Vaccine Delivery Partner⁽³⁾

Examples of some of the great collaborative work underway in our borough are highlighted in this section.

LOCAL RECOMMENDATION

All local stakeholders should utilise relevant forums to discuss best practice, update on progress, identify challenges and work together to overcome identified issues.

However, this report has also highlighted aspects of the vaccine delivery system that would benefit from improved partnership working. For example, we heard that there are some schools in the borough that do not always want to engage with SAIS providers and the school-aged vaccination programme.⁽³⁾ Improving partnerships between disengaged schools and SAIS providers is required to improve uptake of school-aged vaccinations such as the HPV vaccine in the borough.

LOCAL RECOMMENDATION

Local Authority to support schools and immunisation providers to continue developing strong working relationships, to enhance the delivery of school-aged vaccinations.

SECTION THREE

Case study of good practice

SAIS: Learning from Public Health Canada

Across the world, Public Health colleagues are struggling with the challenge of combatting vaccine hesitancy and improving uptake of childhood vaccinations. Whilst vaccine hesitancy may have local nuances, the roots of this challenge are often the same and therefore will require similar solutions.

In 2023, SAIS providers established links with Public Health Canada to share learnings about how to improve immunisation uptake. They reflected on the similarities and differences between approaches taken by the UK and Canada. For example, SAIS colleagues told us about communications sent out by Public Health Canada to promote the HPV vaccine. Canadian comms “come with a very hard-hitting line to parents – your son or daughter is at risk of ... cancer”, which they acknowledged is “very different to how we do it [in the UK]”.⁽³⁾

This partnership is an exciting opportunity for SAIS to share knowledge and lessons learned, and to work collaboratively to improve vaccination uptake.



We need to look at [what they are doing] and see what we can take from it. ”

SAIS representative⁽³⁾

MMR Hackathon

In April 2023, NHS SWL held an MMR Hackathon to identify the barriers to MMR uptake and come up with innovative solutions on how to improve uptake and coverage going forward. The event brought together 30 stakeholders from across the local vaccination system including LA Public Health, NHS, Primary Care and HRCH.

Five recommendations to improve MMR uptake were made:

1. We will create a pilot bringing together a Borough based health visiting team and the roving vaccination team to work together to engage with parents and promote vaccination uptake.
2. We will work with Community Pharmacies to promote further engagement in the vaccination programme and where possible, involvement in a wider range of vaccinations.
3. We will develop our work with Local Authorities to further engage with local Children’s Centres, with a particular focus on MMR 2nd dose uptake.
4. We will work with colleagues in Primary Care to strengthen call and recall systems and will provide resources and support to improve the accuracy of coding in GP practices.
5. We will have a renewed focus on Making Every Contact Count (MECC), working with all partners to investigate ways to increase access to vaccination bookings across the health and care system.

These recommendations will inform a new South West London Immunisation Strategy.

In the interim, actions have been taken within the system to progress the recommendations of the Hackathon. For example, NHS SWL have developed a Standard Operating Procedure to support the visits of Immunisation Coordinators to GP practices, and improve the accuracy of data coding. Call/ recall initiatives are also being planned in geographic areas in SWL with low uptake of the MMR vaccine.

SECTION THREE

Case study of good practice

Wandsworth Public Health Immunisation Steering Group

Led by Public Health, the Immunisation Steering Group provides system leadership to the local vaccination programme and supports collaboration between local partners across the system. Key partners in the Immunisation Steering Group include the NHS SWL ICB, NHSE, Healthwatch, Local Pharmaceutical Committee leads, School Nursing and Immunisation Leads, and wider partners such as education and early years.

The Immunisation Steering Group makes use of a Public Health led framework – the Immunisation Assurance Framework – to understand and tackle challenges to improving vaccination uptake. The diversity of challenges and opportunities faced in delivering and improving vaccination coverage requires a multi-agency and systems led approach. The Immunisation Steering Group has worked collaboratively to tackle a number of key issues in childhood vaccinations.

Tackling challenges and working collectively to improve coverage after the COVID-19 pandemic

Following the publication of **Public Health England's 2021 report on the Impact of COVID-19 on routine childhood immunisations**, the Immunisation Steering Group sought to determine if the national decline in childhood vaccinations was a trend observed locally. Using vaccine ordering system data analysed by Public Health, the Immunisation Steering Group assessed the impact of physical distancing measures on childhood vaccination. Collaborative working saw actions across the system that were led by the Steering Group. These actions included:

- Public Health analysis and GP practice recovery plans supported by NHS leads.
- Delivering campaigns to promote vaccination via children's centres, nurseries and schools.
- Working collaboratively to offer additional community clinics to vaccinate children who have missed their vaccinations.
- Cascaded communications in a variety of languages, accounting for lower uptake groups.

SECTION THREE

5. Local priorities for change and improvement

“What can I change? What is our remit here to change?”
Vaccine Delivery Partner ⁽³⁾

Parents and vaccine delivery partners proposed numerous solutions that would support improvements to local childhood vaccination rates. Whilst many of these can be progressed within the local vaccine delivery system, there were other propositions that are beyond the capacity and jurisdiction of partners at a local, or even regional, level. For example, several partners proposed introducing legislation to mandate that children are vaccinated prior to nursery or school entrance - a ‘no jab, no school’ policy - as has been introduced in countries such as France and Italy, with “remarkably enhanced” vaccination rates. ⁽¹⁰⁴⁾ This could only be delivered at a national level.

“When I go to London meetings, I always say - I can’t change all of that. NHS England this is your bag.”
Vaccine Delivery Partner ⁽³⁾

Partners also proposed interventions which, although possible to carry out at a local level, would be more effective if coordinated and delivered nationally. For example, partners proposed delivering large-scale vaccine promotion campaigns, such as advertisements on TV, to encourage parents to vaccinate their children, as well as a centralised automated data reporting system for vaccinations. ⁽³⁾ Whilst this could be delivered by local partners, the interventions are most effective when ‘done once’ and at scale.

LOCAL RECOMMENDATION

Local stakeholders should utilise relevant forums and channels to advocate for actions that must be advanced at regional and national levels.

“There’s a lot of challenges that are within our control and others that aren’t... We need to focus on what we can achieve within the resources that we have”

Vaccine Delivery Partner ⁽³⁾

This report concludes by proposing recommendations of actions to be advanced by the local vaccine delivery system. These local recommendations have been developed through analysis of the local data alongside review of the solutions proposed by delivery partners and residents. Actions that fit within the local remit and capacity for change have been prioritised, and the recommendations that do not cover the full scope of action that will be required by vaccination partners working at regional and national levels to take forward.

Whilst some of the proposed solutions are specific to the borough, most are applicable to driving improvements beyond the local area. The recommendations can be mobilised by vaccine delivery systems outside of the borough to bring wider advancements in vaccination rates.

These local recommendations, alongside advancements at regional and national levels, will bring improvements to rates of childhood vaccination, in Wandsworth and beyond.

**Together, we will
move the mountain**

Local recommendations



Immunisation providers should explore with parents the reasons for refusal and offer information specific to their concerns. Parents may need time to review the information and so should be followed up shortly after to discuss and offer the vaccination again



Immunisation providers should ensure that parents are provided clear, authoritative, and up-to-date information about the vaccine, including any potential side effects, and the condition the vaccine prevents against. Information should be provided in a range of formats to suit varied needs of parents.



Immunisation providers should consider if there are other staff in the healthcare system who can proactively have detailed discussions with parents about vaccination. This may include health visitors, trained call centre staff, or community pharmacists, amongst others. Staff should be trained so that they are equipped to have effective conversations with parents.



Immunisation providers should consider implementing a pathway for parents who either refused to and/or cannot vaccinate their children. This can include vaccine counselling appointments and advice to mitigate the risks of not vaccinating.



Parents who do not attend appointments should be contacted by their GP and asked about their reason for non-attendance. Parents should then be asked what time would be convenient to attend an appointment.



GP practices should regularly review their records to understand their progress with vaccine uptake and identify any data errors within their records. Immunisation providers should also consider offering refresher sessions for staff on best practice for coding information.



GP practices should identify if there are any particular demographic groups on their practice lists who have a low uptake of vaccination. If so, seek support from local stakeholders, such as the local authority, on how these communities can be better served.



All local stakeholders should utilise relevant forums to discuss best practice, update on progress, identify challenges and work together to overcome identified issues.



Local authority to support schools and immunisation providers to continue developing strong working relationships, to enhance the delivery of school-aged vaccinations.



Local stakeholders should utilise relevant forums and channels to advocate for actions that must be advanced at regional and national levels.

APPENDIX

The Wandsworth vaccine delivery system

The Wandsworth vaccine delivery system is made up of various organisations, each of which has a different role in delivering the Routine Childhood Immunisation Programme

Local Immunisation System						
Roles	General Practice	UKHSA Health Protection Team	NHS England	HRCH	LA Public Health	SWL ICS
Vaccine administration	Registered eligible patients			School Programmes		Community Pharmacy Roving Teams
Advice and Guidance		Epidemiology, strategy and outbreak protocol	Programme delivery		Advice and guidance to the local population and partners	Primary Care
Local Leadership		Leading Health Protection authority			Director of Public Health	
Communications	Patients, promotion and call/recall	Residents and systems partners	Systems partners	Schools, pupils and parents	Residents, members and systems partners	Primary Care
Outbreak Response	Advice and provision of vaccination	Lead agency in response coordination	Ensuring sufficient resource for response	Advice and provision of vaccination	Advice to local population and updates	
Commissioning			Ensure national and regional programme performance			Ensuring local programme performance

Notes: UKHSA - United Kingdom Security Agency, NHS - National Health Service, HRCH - Hounslow & Richmond Community Healthcare NHS Trust, LA - Local Authority, SWL ICS - South West London Integrated Care System

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References

1. Public Health England. Vaccines Work. [Online]. Available from: https://assets.publishing.service.gov.uk/media/5a7f1d89ed915d74e3f46d4/Infographic_Vaccines_v5.pdf.
2. Oxford Vaccine Group, The University of Oxford. HPV Vaccine. Available from: <https://vaccineknowledge.ox.ac.uk/hpv-vaccine>
3. ADPHR Focus Group. 2023.
4. World Health Organization. The Guide to Tailoring Immunization Programmes (TIP). [Online]. Available from: <https://iris.who.int/bitstream/handle/10665/351166/WHO-EURO-2013-4749-44512-63001-eng.pdf?sequence=4&isAllowed=y>.
5. World Health Organization. COVID-19 pandemic fuels largest continued backslide in vaccinations in three decades. [Online]. Available from: <https://www.who.int/news/item/15-07-2022-covid-19-pandemic-fuels-largest-continued-backslide-in-vaccinations-in-three-decades>.
6. Results UK. Written evidence submitted by Results UK (PHS0421). [Online]. Available from: <https://committees.parliament.uk/writtenevidence/118075/pdf/>.
7. UK Health Security Agency. Around 1 in 10 children starting school at risk of measles. [Online].; 2022. Available from: <https://www.gov.uk/government/news/around-1-in-10-children-starting-school-at-risk-of-measles>.
8. World Health Organization. The guide to tailoring immunization programmes. [Online]. Available from: <https://iris.who.int/bitstream/handle/10665/351166/WHO-EURO-2013-4749-44512-63001-eng.pdf?sequence=4&isAllowed=y>.
9. Oxford Vaccine Group, The University of Oxford. What is a vaccine, and how do vaccines work? [Online]. Available from: <https://vaccineknowledge.ox.ac.uk/how-do-vaccines-work>.
10. Health Direct. Immunisation or vaccination – what’s the difference? [Online]. Available from: <https://www.healthdirect.gov.au/immunisation-or-vaccination-whats-the-difference>.
11. DC Health. Vaccine Preventable Diseases. [Online]. Available from: [https://dchealth.dc.gov/page/vaccine-preventable-diseases#:~:text=Vaccine%20preventable%20diseases%20\(VPDs\)%20are,can%20be%20prevented%20with%20vaccines](https://dchealth.dc.gov/page/vaccine-preventable-diseases#:~:text=Vaccine%20preventable%20diseases%20(VPDs)%20are,can%20be%20prevented%20with%20vaccines).
12. Muhoza, Pierre et al. Routine Vaccination Coverage - Worldwide, 2020. Morbidity and mortality weekly report. 2021; 70(43).
13. World Health Organization. Monitoring COVID-19 Vaccination: Considerations for the Collection and Use of Vaccination Data: World Health Organization; 2021.
14. World Health Organization. ‘Vaccine efficacy, effectiveness and protection’. [Online].; 2021. Available from: <https://www.who.int/news-room/feature-stories/detail/vaccine-efficacy-effectiveness-and-protection>.
15. World Health Organization. Global vaccine action plan (GVAP) Regional reports on progress towards GVAP-RVAP Goals. Annex to the GVAP Secretariat Annual Report 2018. [Online].; 2018.
16. UK Health Security Agency. London at risk of measles outbreaks with modelling estimating tens of thousands of cases. [Online]. Available from: <https://www.gov.uk/government/news/london-at-risk-of-measles-outbreaks-with-modelling-estimating-tens-of-thousands-of-cases>.
17. UK Health Security Agency. MMR for all: general guide. [Online]. Available from: <https://www.gov.uk/government/publications/mmr-for-all-general-leaflet/mmr-for-all-general-guide>.
18. Lacy, J. Tessier, E. Andrews, N et al. Impact of an accelerated measles-mumps-rubella (MMR) vaccine schedule on vaccine coverage: an ecological study among London children, 2012–2018. *Vaccine*. 2022; 40(3).
19. Oxford Vaccine Group, University of Oxford. Measles - Key disease facts. [Online].; 2022. Available from: <https://vaccineknowledge.ox.ac.uk/measles#Key-disease-facts>.
20. Oxford Vaccine Group, The University of Oxford. Mumps. [Online].; 2018. Available from: <https://vaccineknowledge.ox.ac.uk/mumps>.
21. Oxford Vaccine Group, University of Oxford. Rubella (German Measles). [Online]. Available from: <https://vaccineknowledge.ox.ac.uk/rubella>.
22. Wellcome Trust. More than a health crisis: Covid-19 impacts are far-reaching and long-term. [Online]. Available from: <https://wellcome.org/news/more-health-crisis-covid-19-impacts-are-far-reaching-and-long-term>.
23. UK Health Security Agency. Daily deaths with COVID-10 on the death certificate by date of death. [Online]. Available from: <https://coronavirus.data.gov.uk/details/deaths?areaType=nation&areaName=England>.
24. Public Health England. COVID-19 vaccines have prevented 7.2 million infections and 27,000 deaths. [Online].; 2021 [cited 2024 01 11. Available from: <https://www.gov.uk/government/news/covid-19-vaccines-have-prevented-7-2-million-infections-and-27-000-deaths>.
25. King’s Fund. Deaths from Covid-19 (coronavirus): how are they counted and what do they show? [Online]. Available from: <https://www.kingsfund.org.uk/publications/deaths-covid-19>.
26. Public Health England. COVID-19: review of disparities in risks and outcomes. [Online].; 2020. Available from: <https://www.gov.uk/government/publications/covid-19-review-of-disparities-in-risks-and-outcomes>.
27. The British Academy COVID-19 and Society. THE COVID DECADE Understanding the long-term societal impacts of COVID-19. [Online]. Available from: <https://www.thebritishacademy.ac.uk/documents/3238/COVID-decade-understanding-long-term-societal-impacts-COVID-19.pdf>.
28. Cervical cancer statistics. [Online]. Available from: <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/cervical-cancer>.
29. NHS Digital. Cancer registrations statistics, England. [Online].; 2023. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/cancer-registration-statistics>.
30. Public Health England. Ten years on since the start of the HPV vaccine programme – what impact is it having? [Online]. Available from: <https://ukhsa.blog.gov.uk/2018/06/18/ten-years-on-since-the-start-of-the-hpv-vaccine-programme-what-impact-is-it-having/>.
31. Palmer, TJ. Kavanagh, K. Cuschieri, K. et al. Invasive cervical cancer incidence following bivalent human papillomavirus vaccination: a population-based observational study of age at immunization, dose, and deprivation. *Journal of the National Cancer Institute*. 2024.

32. UK Health Security Agency. HPV vaccine could prevent over 100,000 cancers. Available from: <https://www.gov.uk/government/news/hpv-vaccine-could-prevent-over-100-000-cancers#:~:text=Estimates%20suggest%20that%20the%20HPV,non%2Dcervical%20cancers%20by%202058.>
33. UKHSA. Ten years on since the start of the HPV programme - what impacts is it having?. [Online]; 2018 [cited 2024 01 17]. Available from: <https://ukhsa.blog.gov.uk/2018/06/18/ten-years-on-since-the-start-of-the-hpv-vaccine-programme-what-impact-is-it-having/>.
34. Wandsworth Council. DataWand - Children and Young People Report for Wandsworth. [Online]. Available from: https://www.datawand.info/children-and-young-people/#/view-report/07853ccb32274062987962b7d4e602b3/___iaFirstFeature/G3.
35. Claire X. Chang CBMAQCHKaCC. Ethnic inequities in routine childhood vaccinations in England 2006–2021: an observational cohort study using electronic health records. *eClinicalMedicine*. 2023 October ; 65.
36. Greater London Authority. Children in low income families. [Online]. Available from: <https://data.london.gov.uk/dataset/children-in-low-income-families>.
37. Office for National Statistics. Population estimates for England and Wales: mid-2022. [Online]. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/populationestimatesforenglandandwales/mid2022>.
38. Greater Local Authority. Indices of Deprivation 2019 Ward level summary measures for London. [Online]; 2019. Available from: <https://data.london.gov.uk/dataset/indices-of-deprivation>.
39. Haider EA WLAN. Identifying inequalities in childhood immunisation uptake and timeliness in southeast Scotland, 2008-2018: A retrospective cohort study. *Vaccine*. 2019 September; 3(37): 5614-5624.
40. Public Health Profiles. [Online]. Available from: <https://fingertips.phe.org.uk/>.
41. UK Health Security Agency. HPV vaccination coverage in adolescent females and males in England 2019 to 2020. [Online]. Available from: <https://www.gov.uk/government/publications/hpv-vaccination-coverage-in-adolescent-females-and-males-in-england-2019-to-2020>.
42. UK Health Security Agency. Human papillomavirus - HPV vaccine coverage estimates in England 2021 to 2022. [Online]. Available from: <https://www.gov.uk/government/statistics/human-papillomavirus-hpv-vaccine-coverage-estimates-in-england-2021-to-2022>.
43. ADPHR Young person Survey. 2023..
44. University College London. Fair Society, healthy lives: Marmot review; 2010.
45. Public Health England. National Immunisation Programme. [Online]; 2021. Available from: https://assets.publishing.service.gov.uk/media/60183a8de90e07128e743b85/immnstn-equity_AUDIT_v11.pdf
46. NHS South West London ICB. SWL Childhood Immunisation Dashboard. 2023..
47. Wandsworth Coucil. Gypsies and Travellers Accomodation Needs Assessment. [Online]; 2019. Available from: https://www.wandsworth.gov.uk/media/8005/gypsies_and_travellers_accommodation_needs_assessment.pdf.
48. ADPHR GP Staff Member Interview. 2023..
49. World Health Organisation. A brief history of Vaccines. [Online]. Available from: <https://www.who.int/news-room/spotlight/history-of-vaccination/a-brief-history-of-vaccination>.
50. Larson HJ, Jarrett C, Eckersberger E, Smith DM, Paterson P. Understanding vaccine hesitancy around vaccines and vaccination from a global perspective: a systematic review of published literature, 2007-2012. 2014; 32.
51. The Science Museum. Complacency, Convenience, Confidenc: The History of Vaccine Hesitancy. [Online]. Available from: <https://blog.sciencemuseum.org.uk/complacency-convenience-confidence-the-history-of-vaccine-hesitancy/>.
52. Strategic Advisory Group of Experts on Immunization Working group. report of the SAGE working group on Vaccine Hesitancy. [Online]. Available from: https://www.asset-scienceinsociety.eu/sites/default/files/sage_working_group_revised_report_vaccine_hesitancy.pdf.
53. ADPHR Parent's Survey. 2023.
54. Royal Society for Public Health. Moving the Needle. [Online]; 2019. Available from: <https://www.rsph.org.uk/static/uploaded/3b82db00-a7ef-494c-85451e78ce18a779.pdf>.
55. Hulse, E and Bland, T. Immune overload: Parental attitudes toward combination and single antigen vaccines. *Vaccine*. 2015; 33(22).
56. Oxford Vaccine Group, University of Oxford. Combination vaccines and multiple vaccinations. [Online]; 2018. Available from: <https://vaccineknowledge.ox.ac.uk/combination-vaccines-and-multiple-vaccinations#Videos-about-combination-vaccines>.
57. Jackson C, Yarwood J, Saliba V, Bedford H. UK parents' attitudes towards meningococcal group B (MenB) vaccination: a qualitative analysis. *BMJ open*. 2017b; 7(4).
58. Brown KF, Long SJ, Ramsay M, Hudson MJ, Green J, Vincent CA, et al. U.K. parents' decision-making about measles-mumps-rubella (MMR) vaccine 10 years after the MMR-autism controversy: a qualitative analysis. *Vaccine*. 2012; 30(10): 1855-64.
59. Gardner B, Davies A, McAteer J, Michie S. Beliefs underlying UK parents' views towards MMR promotion interventions: a qualitative study. *Psychology, health & medicine*. 2010; 15(2): 220-30.
60. Guillaume LR, Bath PA. The impact of health scares on parents' information needs and preferred information sources: A case study of the MMR vaccine scare. *Health Informatics Journal*. 2004; 10(1): 5-22.
61. Kadambari, S and Vanderslott S. 2021. Lessons about COVID-19 vaccine hesitancy among minority ethnic people in the UK. *The Lancet*. 21;9. *The Lancet*. 2021; 21(9).
62. BBC. MMR: How parents feel now about avoiding jabs. [Online]. Available from: <https://www.bbc.co.uk/news/magazine-22354895>.
63. Taylor B, Miller E, Farrington CP, et al. Autism and measles, mumps, and rubella vaccine: no epidemiological evidence for a causal association. *Lancet*. 1999; 353.
64. Fombonne E, Chakrabarti S. No evidence for a new variant of measles-mumps-rubella-induced autism. *Pediatrics*. 2001; 108.

65. Farrington CP, Miller E, Taylor B. MMR and autism: further evidence against a causal association. 2001; 19.
66. DeStefano F, Thompson WW. MMR vaccine and autism: an update of the scientific evidence. *Expert Rev Vaccines*. 2004; 3.
67. BMJ. Wakefield is struck off for the “serious and wide-ranging findings against him”. [Online]; 2010. Available from: <https://www.bmj.com/content/340/bmj.c2803>.
68. Madsen, K. M., Hviid, A., Vestergaard, M. et al. A population-based study of measles, mumps, and rubella vaccination and autism. *New England Journal of Medicine*. 2002; 347(19).
69. Hviid, A., Hansen, J. V., Frisch, M., & Melbye, M.. Measles, Mumps, Rubella Vaccination and Autism: A Nationwide Cohort Study. *Annals of internal medicine*. 2019; 170(8).
70. NHS Digital. NHS Immunisation Statistics - England 2004-05. [Online]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-immunisation-statistics/nhs-immunisation-statistics-england-2004-05>.
71. Asaria, P and MacMahon E. Measles in the United Kingdom: can we eradicate it by 2010? *BMJ*. 2006; 333(7574).
72. Godlee F, Smith J, Marcovitch H. Wakefield’s article linking MMR vaccine and autism was fraudulent. *BMJ*. 2011; 342.
73. Antona D, Lévy-Bruhl D, Baudon C, et al. Measles elimination efforts and 2008-2011 outbreak, France. *Emerg Infect Dis*. 2013; 19.
74. Motta, M and Stecula D. Quantifying the effect of Wakefield et al. *PLoS One*. 2021; 16(8).
75. ADPHR GP Survey. 2023.
76. NHS South West London. NHS South West London MMR Focus Group. 2023.
77. Larson, H. J., Lin, L., & Goble, R. Vaccines and the social amplification of risk. *Risk Analysis*. 2022; 42.
77. ADPHR Parents Interview. 2023.
78. McKee, C., & Bohannon, K.. Exploring the Reasons Behind Parental Refusal of Vaccines. *The Journal of Pediatric Pharmacology and Therapeutics*. 2016; 21(2).
79. NHS South West London. Childhood Vaccine Hesitancy Survey.
80. Cancer Research UK. Cervical cancer incidence statistics. [Online]. Available from: <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/cervical-cancer/incidence>.
81. NHS England and NHS Improvement. Interim findings of the Vaccinations and Immunisations Review – September 2019. [Online].; 2019. Available from: <https://www.england.nhs.uk/wp-content/uploads/2019/10/interim-findings-of-the-vaccinations-and-immunisations-review-2019.pdf>.
82. New SJ, Senior ML. I don’t believe in needles: Qualitative aspects of a study into the uptake of infant immunisation in two English Health Authorities. *Social Science and Medicine*. 1991; 33(4): 509-518.
83. Stein Zamir C, Israeli A. Knowledge, Attitudes and Perceptions About Routine Childhood Vaccinations Among Jewish Ultra-Orthodox Mothers Residing in Communities with Low Vaccination Coverage in the Jerusalem District. *maternal and child health journal*. 2017; 21(5): 1010-1017.
84. Sporton RK FS. Choosing not to immunize: are parents making informed decisions? *Fam Pract*. 2001; 18(2): 181-188.
85. UK Health Security Agency. Supporting immunisation programmes. [Online]. Available from: <https://www.gov.uk/government/publications/health-protection-in-schools-and-other-childcare-facilities/supporting-immunisation-programmes>.
86. UK Health Security Agency. Cover of vaccination evaluated rapidly (COVER) programme 2020 to 2021: quarterly data. [Online]. Available from: <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2020-to-2021-quarterly-data>.
87. UK Health Security Agency. Cover of vaccination evaluated rapidly (COVER) programme 2021 to 2022: quarterly data. [Online]. Available from: <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2021-to-2022-quarterly-data>.
88. UK Health Security Agency. Cover of vaccination evaluated rapidly (COVER) programme 2022 to 2023: quarterly data. [Online]. Available from: <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2022-to-2023-quarterly-data>.
89. UK Health Security Agency. Cover of vaccination evaluated rapidly (COVER) programme 2023 to 2024: quarterly data. [Online]. Available from: <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2023-to-2024-quarterly-dat>.
90. Gabarron, E., Oyeyemi, S. O., & Wynn, R. COVID-19-related misinformation on social media: A systematic review. *Bulletin World Health Organization*. 2021; 99(6).
91. Himelein-Wachowiak, M., Giorgi, S., Devoto, A., Rahman, M., Ungar, L., Schwartz, H. A., Epstein, D. H., Leggio, L., & Curtis, B. Bots and misinformation spread on social media: Implications for COVID-19. *Journal of Medical Internet Research*. 2021; 23(5).
92. NHS South West London. Findings of the Sutton Data Pilot.
93. National Audit Office. Investigation into pre-school vaccinations. [Online]. Available from: <https://www.nao.org.uk/wp-content/uploads/2019/08/Investigation-into-pre-school-vaccinations.pdf>.
94. Office for National Statistics. International migration, England and Wales: Census 2021. [Online]. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/bulletins/internationalmigrationenglandandwales/census2021>.
95. Pearce, A. Elliman, D. Bedford, H. and Law, C. Residential mobility and uptake of childhood immunisations: Findings from the UK Millennium Cohort Study. *Vaccine*. 2008; 26(13).
96. Palamenghi L, Barello S, Boccia S, et al. Mistrust in biomedical research and vaccine hesitancy: the forefront challenge in the battle against COVID-19 in Italy. *Eur J Epidemiol*. 2020; 35:785–8.
97. Doornekamp L, van Leeuwen L, van Gorp E, et al. Determinants of Vaccination Uptake in Risk Populations: A Comprehensive Literature Review. *Vaccines*. 2020; 8:480.

98. Bricout H, Torcel-Pagnon L, Lecomte C, et al. Determinants of shingles vaccine acceptance in the United Kingdom. *PLoS ONE*. 2019; 14.
99. Hobson-West, P. 'Trusting blindly can be the biggest risk of all': organised resistance to childhood vaccination in the UK. *Sociol Health Illn*. 2007; 29.
100. Brownlie J and Howson A. 'Leaps of faith' and MMR: an empirical study of trust. *Sociology*. 2005; 39.
101. Nursing Times. [Online].; 2016 [cited 2024 01 24. Available from: <https://www.nursingtimes.net/news/primary-care/steep-decline-in-health-visitors-discussing-vaccination-26-11-2016/>.
102. Redsell SA,BH,SAN,CJ,aAP. Health visitors' perception of their role in the universal childhood immunisation programme and their communication strategies with parents. *Primary Health Care Research and Development*. 2010; 11(1): 51-60.
103. Trentini F,Poletti P,Melegaro A and Merler S. The introduction of 'No jab, No school' policy and the refinement of measles immunisation strategies in high-income countries. *BMC Medicine*. 2019; 17.
104. Health Protection Agency. MigrantHealthGuide. [Online]. Available from: <https://webarchive.nationalarchives.gov.uk/ukgwa/20140714094254/http://www.hpa.org.uk/MigrantHealthGuide/HealthTopics/InfectiousDiseases/Polio/>.
105. Wandsworth Council. DataWand. [Online]. Available from: <https://www.datawand.info/population-explorer/>.
106. Office for National Statistics. Population estimates for the UK, England, Wales, Scotland and Northern Ireland: mid-2021. [Online]. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2021>.
107. Falcaro, et al. The effects of the national HPV vaccination programme in England, UK, on cervical cancer and grade 3 cervical intraepithelial neoplasia incidence: a register-based observational study. 2021.
108. Wandsworth Council. DataWand - Children and Young People Report. [Online]. Available from: https://www.datawand.info/children-and-young-people/#/view-report/07853ccb32274062987962b7d4e602b3/___iaFirstFeature/G3.
109. United Nations Children's Fund. The State of the World's Children 2023: For every child, vaccination. [Online].; 2023. Available from: <https://www.unicef.org/media/108161/file/SOWC-2023-full-report-English.pdf>.
110. Curtis, HJ, Inglesby, P, Morton CE et al. Trends and clinical characteristics of COVID-19 vaccine recipients: a federated analysis of 57.9 million patients' primary care records in situ using OpenSAFELY. *British Journal of General Practice*. 2022; 72(714).
111. Larson, H J., Gakidou E, and Murray CJL,. The Vaccine-Hesitant Moment. *New England Journal of Medicine*. 2022; 387.
112. Arbyn, M., Xu, L., Simoens, C., & Martin-Hirsch, P. P. Prophylactic vaccination against human papillomaviruses to prevent cervical cancer and its precursors. *The Cochrane database of systematic reviews*. 2018; 5(5).
113. Daily Mail. Teenager died in her sleep weeks after being given HPV vaccine as experts reveal the lives of thousands of girls have been destroyed by the controversial jab. [Online].; 2017. Available from: <https://www.dailymail.co.uk/health/article-4909164/Teen-died-HPV-jab-experts-brand-vaccine-useless.html>.
114. Mrozek- Budzyn, D, Kieltyka, A, Majewsja, R, Augustyniak, M. Measles, mumps and rubella (MMR) vaccination has no effect on cognitive development in children - the results of the Polish prospective cohort study. *Vaccine*. 2013; 31(22).
115. Honda, H, Shimizu, Y, Rutter, M. No effect of MMR withdrawal on the incidence of autism: a total population study. *Journal of Child Psychology and Psychiatry*. 2005; 46(6).

