

# Report to Children and Young People Scrutiny Panel on Section 7a 0-5 Child and Immunisation Programmes in Merton 2018



# Report on Child 0-5 Section 7a Immunisation Programmes in London Borough of Merton

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Presented to: Children and Young People's Scrutiny Panel.

Classification: OFFICIAL

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# 1 Aim

- The purpose of this paper is to provide an overview of Section 7a childhood immunisation programmes in the London Borough of Merton for 2017/18. The paper covers the vaccine coverage and uptake for each programme along with an account of what NHS England (NHSE) London Region are doing to improve uptake and coverage.
- Section 7a immunisation programmes are publicly funded immunisation programmes that cover the life-course and the 18 programmes include:
  - Antenatal and targeted new-born vaccinations
  - Routine Childhood Immunisation Programme for 0-5 years
  - School age vaccinations
  - Adult vaccinations such as the annual seasonal influenza vaccination
- This paper focuses on those immunisation programmes provided for 0-5 years under the national Routine Childhood Immunisation Schedule and child 'flu vaccination.
- Members of the Children and Young People Scrutiny Panel are asked to note and support the work NHSE (London) and its partners such as Public Health England (PHE), the local authority and the Clinical Commissioning Groups (CCGs) are doing to increase vaccination coverage and immunisation uptake in Merton.

# 2 Roles and responsibilities

- The Immunisation & Screening National Delivery Framework & Local Operating Model (2013) sets out the roles and responsibilities of different partners and organisations in the delivery of immunisations.
- Under this guidance, NHSE, through its Area Teams (known as Screening and Immunisation Teams), is responsible for the routine commissioning of all National Immunisation Programmes under the terms of the Section 7a agreement. In this capacity, NHSE is accountable for ensuring that local providers of services deliver against the national service specifications and meet agreed population uptake and coverage levels. NHSE is also responsible for monitoring providers' performance and for supporting providers in delivering improvements in quality and changes in the programmes when required.
- Public Health England (PHE) Health Protection Teams lead the response to outbreaks of vaccine preventable disease and provide expert advice to NHSE screening and immunisation teams in cases of immunisation incidents. They also provide access to national expertise on vaccination and immunisation queries. In Merton, this function is provided by the PHE South London Health Protection Team.

- Clinical Commissioning Groups (CCGs) have a duty of quality improvement, and this extends to primary medical care services delivered by GP practices, including delivery of childhood immunisation services.
- Local Authority Public Health Teams (LAs) have an oversight function and are responsible for providing independent scrutiny and challenge of the arrangements of NHSE, PHE and providers.
- Across the UK, the main providers of childhood immunisation are GP practices.
   In Merton, all general practices are contracted to deliver childhood immunisations for children aged 0-5 through their primary care contract.
- Hounslow & Richmond Community Healthcare NHS Trust (HRCH) are contracted by NHSE (London) to provide the targeted neonatal BCG vaccination and the school age immunisations.
- Immunisation data is captured on Child Health Information Service (CHIS) for Merton as part of the SWL CHIS Hub (provided by Your Healthcare CIC). Data is uploaded into CHIS from GP practice records via a data linkage system provided by QMS. The CHIS provide quarterly and annual submissions to Public Health England for their publication of statistics on 0-5s childhood immunisation programmes. This is known as Cohort of Vaccination Evaluated Rapidly (COVER) and these statistics are official statistics.
- Apart from attendance at Health and Social Care Overview Panels and at Health and Well-Being Boards as and when required, NHSE (London) also provides assurance on the delivery and performance of immunisation programmes via quarterly meetings of Immunisation Performance and Quality Boards. There is one for each Strategic Transformation Partnership (STP) footprint.

The purpose of these meetings is to quality assure and assess the performance of all Section 7a Immunisation Programmes across the STP in line with PHE standards, recommendations and Section 7a service specifications as prepared by PHE with NHSE commissioning. All partners are invited to this scrutiny meeting, including colleagues from the Local Authority, CCG, CHIS, NHSE, PHE Health Protection and Community Provider service leads. Data for Merton is covered in the SWL STP Immunisation Performance and Quality Boards.

 Directors of Public Health across London also receive quarterly reports from the London Immunisation Partnership Board and updates via the Association of Directors of Public Health. It is through these communication channels that progress on the Bi-annual London Immunisation Plan (2017-19) and its accompanying annual Flu Plans are shared.

## 3 Headlines for London

• Historically and currently, London performs lower than national (England) averages across all the immunisation programmes.

- London faces challenges in attaining high coverage and uptake of vaccinations due to high population mobility, increasing population, increasing fiscal pressures and demands on health services and a decreasing vaccinating workforce.
- Under the London Immunisation Partnership Board, NHSE (London Region and PHE (London Region) seek to ensure that the London population are protected from vaccine preventable diseases and are working in partnership with local authorities, CCGs and other partners to increase equity in access to vaccination services and to reduce health inequalities in relation to immunisations.

# 4 Routine Childhood Immunisation Programme (0-5 years)

- The routine childhood immunisation programme protects against:
  - Diphtheria, Tetanus, Pertussis (whooping cough), Polio, Haemophilus
  - Influenza type b (given as the '6 in 1' DTaP/IPV/Hib/HepB vaccine)
  - Pneumococcal disease (PCV)
  - Meningococcal group C disease (Men C)
  - Meningococcal group B disease
  - Measles, mumps and rubella (MMR)
- Children aged 1 year should have received 3 doses of 6 in 1 (called the primaries) and 2 doses of Men B. If eligible, they may also be offered the targeted BCG and Hep B.
- At 12 months, they are offered first dose of MMR and the boosters of PCV, Hib/Men C and Men B.
- At 2 years and again at 3 years, children are offered annual child influenza vaccine.
- From 3 years 4 months to 5 years, children are offered second dose of MMR and preschool booster (which is the fourth dose of the diphtheria/tetanus/pertussis/polio course).

# 5 What is COVER and how is it produced?

• COVER monitors immunisation coverage data for children in UK who reach their first, second or fifth birthday during each evaluation quarter – e.g. 1<sup>st</sup> January 2012 to 31<sup>st</sup> March 2012, 1<sup>st</sup> April 2012 – 30<sup>th</sup> June 2012. Children having their first birthday in the quarter should have been vaccinated at 2, 3 and 4 months, those turning 2 should have been vaccinated at 12/13 months and those who are having their 5<sup>th</sup> birthday should have been vaccinated before 5 years, ideally 3 years 3 months to 4 years. This is an important point to note as often COVER statistics are used to improve uptake in general practice populations or communities. However, the data used is between 6 months and 18 months out of date and opportunities to ensure that those cohorts have been immunised in

accordance with the routine immunisation schedule have therefore been missed.

 There are known complexities in collecting data on childhood immunisations. Indeed, since 2013, London's COVER data is usually published with caveats and drops in reported rates are always due to data collection or collation issues for that quarter. Production of COVER statistics in London involves a range of individuals and organisations with different roles and responsibilities.

# 5.1 Role of Child Health Information Service (CHIS)

- London has four CHIS Hubs North East London (provider is North East London Foundation Trust, NELFT), South East London (provider is Health Intelligence), South West London (provider is Your Healthcare CIC) and North-West London (provider is Health Intelligence). These Hubs are commissioned by NHSE to compile and report London's quarterly and annual submissions to PHE for COVER.
- A 'script' or algorithm is utilized to electronically extract anonymous data from the relevant data fields to compile the reports for COVER within the caveats specified. For example, for first dose of MMR, any child who had their MMR vaccination before their first birthday are not included and so appear unvaccinated.
- CHIS Hubs are commissioned to check the reports run and are expected to refresh the reports before final submission to PHE.
- CHIS Hubs are also commissioned to 'clean' the denominator by routinely undertaking 'movers in and movers out' reports. This is to ensure the denominator is up-to-date with the children currently resident in London. They are also expected to account for the vaccinations of unregistered children in London. Historically and currently, there are ongoing issues with CHIS Hubs keeping up-to-date with movers in and removals which is picked up in contract performance meetings with the NHSE (London) commissioners.

# 5.2 Role of Data Linkage Systems

- Immunisation data is extracted from London's general practices' IT systems and uploaded onto the CHIS systems. This isn't done directly by the CHIS Hubs. Instead data linkage systems provided by three different providers provide the interface between general practices and CHIS. Two of these providers – QMS and Health Intelligence – are commissioned by NHSE whilst 4 CCGs in outer North-East London commission a separate system.
- Since the primary purpose of CHIS is to hold health information on individual children, the immunisation data extracted from general practices is patient identifiable data (PID). As a result, data sharing agreements is required between each general practice and CHIS.

 NHS (London) Immunisation Commissioning Team receives data linkage reports from QMS and Health Intelligence. This provides a breakdown by general practice of the uptake of vaccinations in accordance to the COVER cohorts and cohorts for Exeter (for payments). This information is utilized by the team as part of the 'COVER SOP', to check against the COVER submissions by CHIS to question variations or discrepancies.

### 5.3 Role of General Practice

- While data linkage systems provide an automated solution to manual contact between CHIS and general practices, data linkage does not extract raw data. General practices have to prepare the data for extraction every month. This will vary between practices how automated the process is but it can be dependent upon one person to compile the data in time for the extraction by the data linkage system providers and should this person be on annual or sick leave, there will be missing data.
- General practices have to prepare data for four immunisation data systems COVER, ImmForm (although this is largely done by their IT provider of Vision, EMIS or TPP SystmOne, all of whom are commissioned by their CCG), CQRS (the payments system run by NHS England for the payment of administration of the vaccine) and Exeter (payments system, whereby practices receive targeted payments for achieving 70% or 90% uptake of their cohorts these cohorts are different to the COVER cohorts of children). Preparation of data for the systems again will vary between practices but this can be time and resource intensive.
- The aggregated immunisation data in each practice is dependent upon the quality of patient records. When a practice nurse vaccinates a child, the record of the vaccination should be recorded onto the GP IT system and into the child's hand held personal record (the Redbook) in a timely manner.
- There is also an array of codes that can be used to code the vaccination (if a code different to what the data linkage system recognises is utilised, it results in the child looking unvaccinated) and there are difficulties with coding children who received their vaccinations abroad or delays in information on vaccinations given elsewhere in UK being uploaded onto the system in time for the data extraction. (During 2015/16, the team visited 300 practices to uncover the issues in vaccinating 0-5-year olds and these were the main factors vocalised by practice managers.)
- Whilst NHSE (London) immunisation commissioning team verify and pay administration of vaccines that are part of the Section 7a immunisation programmes, they do not commission general practices directly. Vaccination services, including call/recall (patient invite and reminder systems) are contracted under the General Medical Services (GMS) contract. This contract

is held by primary care commissioning directorates of NHSE. To date, there is a lack of clarity on what levers NHSE (London) Immunisation Commissioning Team (with primary care colleagues) can use to ensure robust high-quality data for extraction for COVER and that practices are undertaking adequate call/recall.

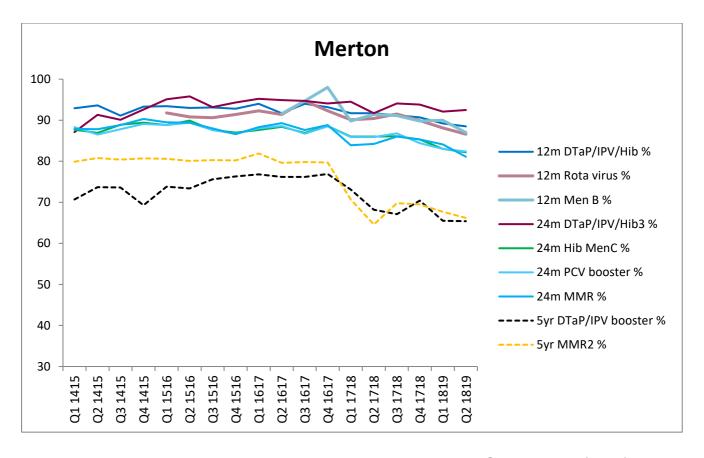
# 6 Merton and the challenges

- Merton is affected by the same challenges that face the London region. London
  has in recent years delivered significantly poorer uptake than the remainder of
  the country. Reasons for the low coverage include:
  - Complexities in data collection for COVER statistics
  - The increasing birth rate in London which results in a growing 0-5 population and puts pressure on existing resources such as GP practices
  - London's high population mobility which affects data collection and accuracy
  - Inconsistent patient invite/reminder (call-recall) systems across London
  - Declining vaccinating workforce
  - Increasing competing health priorities for general practice
- London's high population turnover is a big factor. There is a 20-40% annual turnover on GP patient lists which affects the accuracy of the denominator for COVER submissions, which in Merton's case inflates the denominator (i.e. number of children requiring immunisation) resulting in a lower uptake percentage. A 2017 audit by London's CHIS providers showed that by the age of 12 months, 33% of infants moved address at least once.
- However, despite London's percentage uptake being lower than other regions, London vaccinates almost twice as many 0-5 year olds than any other region. If you look at MMR2 as an indicator of completion of programme, London reported 79.5% uptake for 2016/17 compared to England's 87.6%. We vaccinated 100,293 five year olds with MMR2 in 2016/17, down from 104,031 in 2015/16 but more than any other region – South East (the next biggest region) vaccinated 99,434 (86.2% coverage)
- It could be argued that with a bigger denominator, London has a bigger number of unvaccinated children. However, only a proportion of these 'unvaccinated' children are truly unvaccinated, the others have been vaccinated abroad (there are known difficulties recording these) or within UK (records may not be updated in time for the data extraction). These vaccinations have not been captured on data systems. Similarly, there are children who are vaccinated outside the schedule (either early or late) and are not included in the cohorts reported.

# 6.1 Merton's uptake and coverage rates

- Like many other London boroughs, Merton has not achieved the World Health Organisation recommended 95% coverage for the primaries and MMR to provide herd immunity, i.e. the proportion of people that need to be vaccinated in order to stop disease spreading in the population.
- Uptake of childhood immunisations has historically been low in Merton and in 2012/13 Sutton and Merton Primary Care Trust reported some of the lowest immunisations rates in London. Since then, improvements have been made and in 2016/17, Merton reported some if its highest immunisation rates. However, again in 2017/18 (latest annual data available) MMR2 and pre-school booster uptake has reduced and sees Merton with one of the lowest rates in England and London.
- Quarterly rates vary considerably more than annual rates but are used in this report, so that Quarter 2 data from 2018/19 (the latest available data) could be included.
- Figure 1 provides a snapshot of Merton's 0-5 immunisation programmes. For the vaccinations for the age 1 and 2 cohorts, reported percentage uptake is in the high 80s. This is in line with London averages. There is a drop in the age 5 vaccinations (preschool booster and MMR2) from Q4 2016/17 onwards. This coincides with the changes to the provision of CHIS in London and the emergence of the new CHIS Hubs. Since then the hubs have had to reconcile data firstly 0-5s, then 6-19 years. This has impacted upon the quality and production of data.
- Where uptake of vaccinations is close together, this typically indicate a good quality of service provision (as seen by the age 1 vaccinations). A drop off between age 1 and age 2 and again by age 5 indicates system ability to call/recall and track children. Despite the data quality, this is clearly seen here and work is underway across London to improve call/recall systems.

Figure 1
Uptake rates of 0-5 vaccinations for Merton Q1 2014/15 – Q2 2018/19

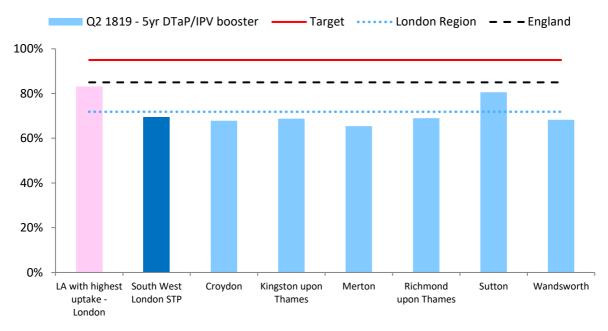


Source: PHE (2018)

- For immunisations, uptake is usually compared with geographical neighbours as immunisation uptake is affected by service provision - neighbouring boroughs in SWL historically have similar general practice provision and thereby provide a better comparison than statistical neighbours.
- Figures 2 and 3 compare Merton to other South West London boroughs using quarterly COVER statistics for the two last vaccinations for the 0-5s Routine Childhood Schedule which can be used as indicators of completed vaccinations (coverage).
- At a local authority level, Croydon, Haringey, Kensington and Chelsea, Merton, Newham and Westminster have sub-optimal uptake rates for MMR1 less than 90% and of concern 70% and less for two doses of MMR by five years of age.
- Merton performs at the bottom of the group and is also the 4<sup>th</sup> lowest for MMR2 and 6<sup>th</sup> lowest for pre-school booster in England and London

Figure 2

MMR Vaccine Dose 2 – measured at 5 years of age Q2 2018/19



MMR Vaccine Dose 2 – measured at 5 years of age (quarterly data Q3 17/18 to Q2 2018/19)

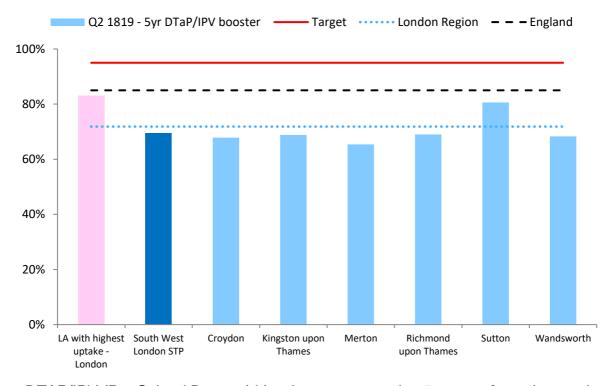
	Q3 1718	Q4 1718	Q1 1819	Q2 1819
ENGLAND	87.3%	87.2%	0.0%	86.4%
London	77.1%	77.6%	72.2%	74.8%
LA with highest uptake - London	90.0%	88.7%	90.2%	87.0%
South West London STP	73.4%	73.2%	74.5%	73.3%
Croydon	71.0%	63.8%	67.2%	67.2%
Kingston upon Thames	71.1%	73.0%	79.6%	75.1%
Merton	69.8%	69.5%	67.7%	66.2%
Richmond upon Thames	64.9%	75.0%	76.0%	73.4%
Sutton	83.9%	81.9%	81.9%	82.5%
Wandsworth	79.1%	80.7%	79.9%	79.0%

Source: PHE (2018)

Figure 3

DTAP/IPV (Pre School Booster) Vaccine – measured at 5 years of age quarter 2

18/19)



DTAP/IPV (Pre School Booster) Vaccine – measured at 5 years of age (quarterly data Q3 17/18 to Q2 2018/19)

	Q3 1718	Q4 1718	Q1 1819	Q2 1819
	Q3 1718	Q4 1/18	Q1 1619	QZ 1619
ENGLAND	85.9%	85.5%	0.0%	85.0%
London	75.0%	75.5%	69.2%	71.8%
LA with highest uptake - London	91.3%	85.2%	83.6%	83.1%
South West London STP	69.7%	71.0%	71.0%	69.5%
Croydon	67.1%	64.1%	68.0%	67.8%
Kingston upon Thames	75.3%	78.0%	73.8%	68.8%
Merton	67.1%	70.4%	65.5%	65.4%
Richmond upon Thames	66.5%	71.7%	71.4%	69.0%
Sutton	79.7%	80.5%	82.5%	80.6%
Wandsworth	67.8%	69.8%	69.8%	68.3%

Source: PHE (2018)

# 6.2 What are we doing to increase uptake of COVER?

- Merton like other London boroughs performs below England averages for completed routine childhood immunisations as indicated by MMR 2<sup>nd</sup> dose and preschool booster. This is also below the recommended WHO 95% recommended uptake levels.
- Achieving and sustaining high coverage rates of two doses of MMR vaccine is an ambition vision for London that requires full engagement and partnership working with all stakeholders and delivery partners across the health system.
- NHS England have produced a Measles Action Plan which sets out a comprehensive system wide approach for high coverage of the MMR vaccine.
   Its vision is to achieve coverage rates of 95% for MMR1 and MMR2 by 5 years of and in older age groups five to 25 years of age.
- Improving uptake rates in Merton is being undertaken by pan London endeavours as well as local borough partnership work between CCG, local authority, PHE and NHSE London. This includes developing a local action to address drop in vaccination rates particularly to support increasing MMR and pre-school booster at age 5 years.
- School Aged Immunisation providers routinely include information on MMR and administer MMR1 and/or MMR2 to complete immunisation course.
- Increasing coverage and uptake of the COVER reported vaccinations to the recommended 95% levels is a complex task. Under the London Immunisation Partnership Board, PHE and NHSE (London) have been working together to improve quality of vaccination services, increasing access, managing vaccine incidents and improving information management, such as better data linkages between Child Health Information Systems (CHIS) and GP systems.
- As well as these pan London approaches, NHSE (London) have been working locally with PHE health protection teams, CCGs and local public health teams in local authorities to identify local barriers and vulnerable or underserved groups (e.g. travelling community) and to work together to improve public acceptability and access and thereby increase vaccine uptake.
- The London wide Immunisation Plan for 2017/19 included sub-sets of plans such as improving parental invites/reminders across London, which the evidence repeatedly states as the main contributor to improving uptake of 0-5s vaccinations. A census of London's 1401 GP practices resulted in the production of 0-5s call/recall best practice pathway and a 0-5s best practice pathway. Under the London Immunisation Partnership PHE and NHSE (London) are evaluating the impact of these pathways over the next few months.
- An evaluation of the 300 practices in London last year in relation to improving uptake of COVER reported vaccinations also concluded that practices need support around information materials to discuss with parents which the NHSE

(London) immunisation team are addressing in conjunction with our PHE colleagues.

- London continues to have a large proportion of children vaccinated outside London and overseas which often means that children are reported as unvaccinated when they have been vaccinated but on a different schedule. Work is underway to help GPs code the vaccinations of these new patients.
- Merton Immunisations Steering group which meets quarterly chaired by Merton CCG Clinical lead and includes representatives from NHS England, Local Authority and providers of immunisations to agree local actions
- Childhood Immunisations has been one of the 5 key outcomes under the Best Start in Life theme for the Health and Well-being Strategy (2015 2018). This has kept a focus on improving immunisations locally.
- Public Health promotion of childhood immunisations across the borough e.g. articles in My Merton (which is a publication that goes into every single home in Merton), Young Merton Together, Social media etc. Promotion of children's flu vaccinations through leaflets sent to all Libraries and Children's Centres. Stall in library to promote flu vaccinations.
- Training for GP Practices nurses on childhood immunisations including flu and sharing of best practice.
- Articles in GP newsletter on childhood immunisations/flu and in particular measles to remind GPs to continue to vaccinate and target opportunistically as well as systematically.
- Health Visiting services commissioned by Public Health in LA are systematically (through universal health reviews) as well as opportunistically asking about the child's immunisations, promoting immunisations take up as well as signposting parents to their GP for their child to be immunised.

# 7 Child 'flu vaccination

- There is a national ambition for 40-60% and from London achieved these in 17/18 for the school age groups.
- Our goal in London was to achieve 40% uptake rates in 2 and 3 year olds and 50% in School Years 1, 2 and 3 and 40% in reception and School year 4
- Age 2 and 3 remain under 40% but the 2017/18 figures reflect the highest ever proportion of children vaccinated with child flu vaccine in these age groups.
- Figure 4 displays the comparison of London's 2017/18 rates to the previous year whilst Figure 5 compares Merton with the rest of its geographical neighbours and London and England averages. Merton performs well for its child 'flu programmes there are year on year improvements. This can even be seen in the 63.1% of reception children being vaccinated, which is higher than the original child 'flu group of Year 4 (they've been receiving the vaccination since Year 1), where only 56.9% were vaccinated.

Figure4
Child 'Flu vaccination rates for London 2016/17 and 2017/18

	Age 2	Age 3	Reception	Year 1	Year 2	Year 3	Year 4
London 17/18	33.1%	33.1%	51%	49%	48%	45%	41%
London 16/17	30.4%	32.5%	n/a	45%	43%	42%	n/a

Figure 5
Uptake of child flu vaccination for Merton CCG compared to other SWL CCGs,
London and England for Winter 2017/18 (September 1st 2017 – January 31st 2018)

CCG	% of 2 year olds	% of 3 year olds	% of Reception	% of year 1	% of year 2	% of year 3	% of year 4
Croydon	33.2	33.4	53.4	53.4	51	49	48.4
Kingston	38.9	40.7	71.5	69.3	69.6	66.8	66.3
Merton	35.1	35.8	63.1	61.4	60.5	58.7	56.9
Richmond	40.0	38.1	74.3	72.8	71	68.4	66
Sutton	40.0	39.3	70.2	66.1	66.6	62.8	64.2
Wandsworth	39.5	38.8	60	56.7	54	50.2	47.7
London	33.2	33.3	51.6	49.6	48.2	45.6	43.8
England	38.9	41.5	62.6	61	60.4	57.6	58

Source: PHE (2018)

## 8 Outbreaks of Vaccine Preventable Diseases

- PHE SL Health Protection Team has the remit to survey and respond to cases
  of vaccine preventable diseases. Where they declare a cluster or an outbreak,
  NHSE (London) have commissioned Imms01 which is the commissioner
  response. Under this we can mobilise a provider service response to vaccinate
  the designated contacts.
- During January and June 2018, a total of 131 confirmed measles cases were reported for South London, a big increase on a total of 32 for the previous year. Croydon accounted for a third of these cases. Merton had 5 confirmed cases.
- Being January and June 2018, a total of 24 confirmed mumps cases were reported for South London. In Merton, there was only one case.
- Adults aged 25 years and older accounted for the majority of measles and mumps cases.
- NHSE (London) are working with PHE Health Protection Teams as part of the London Immunisation Business Group to reduce the number of measles and mumps cases in the population by increasing uptake of MMR in the adolescent and adult populations as well as the under 5s. This group drives our London MMR plan 2018/19.

# 9 Next Steps

 NHSE (London) continues to work on delivering the WHO European and national strategies to improve coverage and to eliminate vaccine preventable diseases. In London this is done through the London Immunisation Plan which is reviewed annually by the London Immunisation Partnership.  Quarterly assurance is provided on Merton through the SWL Immunisation Performance and Quality Board where challenges and solutions can be discussed around the performance data and the surveillance data.