Vaccinations

Summary

All children in Hampshire are offered vaccinations according to the national schedule which provides protection against 10 preventable diseases for boys and 11 for girls.

- The uptake of 2 doses of MMR vaccine by 6 years of age is below the recommended target of 95% across the county - North Hampshire CCG and North East Hampshire and Farnham CCG have the lowest uptake at 91.16% and 91.23% respectively.
- The uptake of the Teenage Booster falls short of the 90% target across Hampshire - North East Hampshire and Farnham CCG and West Hampshire CCG have the lowest recorded uptake at 43.47% and 52.67% respectively.
- Uptake of seasonal flu vaccination amongst 'at risk' groups under the age of 65 was 55% in Hampshire during 2012/13, lower than the Department of Health target of 70%.
- Great improvements have been made in vaccinating Children Looked After for 12 months or more, rising from 69% in 2010 to 84% in 2012.

Recommendations

- General practices and school nurses need to ensure they have a robust call and recall system in place for the Teenage booster.
- Data flow from primary care providers to the Child Health Records Department should be timely and accurate.
- All CCGs need to focus on improving the uptake of the seasonal flu vaccine for 'at risk' groups focussing on chronic respiratory and chronic liver disease groups. Working more closely with secondary care providers may help to improve uptake.
- Monitoring by commissioners and CCGs of uptake rates for childhood vaccination at practice level on a quarterly basis is recommended and action taken accordingly for underachievement.
- Maintain the neonatal hepatitis B vaccination pathway.

Vaccinations

1. Introduction

Infectious diseases are caused by pathogenic microorganisms such as bacteria and viruses and where the disease can be spread, directly or indirectly, from one person to another. Vaccination is one way of protecting against certain diseases and the UK Department of Health (DH) considers it is '*the safest way to protect individuals and communities from infectious diseases*' whilst the USA Center for Disease Control and Prevention lists vaccination as one of the top ten public health achievements worldwide (CDC, 2011)[1].

Vaccination is a proven tool for controlling and eradicating infectious diseases across the world. Coordinated vaccination programmes have led to the successful eradication of some diseases such as smallpox and reduced morbidity caused by others, for example measles. Avoidable illness, disability and deaths have also declined worldwide as a result of vaccination programmes[2].
The World Health Organisation (WHO) recommends a vaccination uptake rate of 95% to achieve herd immunity. Herd immunity is extremely important, as it provides a measure of protection for people who have not developed immunity. It occurs when large numbers of people are immune or less susceptible to an infectious disease (for example through a comprehensive vaccination programme), resulting in non-immune or more susceptible people being less likely to come into contact with someone who is infectious.

The Joint Committee on Vaccination and Immunisation (JCVI) advises the Secretary of State for Health in England and Welsh ministers on matters relating to the provision of vaccination and immunisation services. They base their advice on consideration of scientific and other evidence that is then used by Government to inform, develop and make policy. To support clinicians, Public Health England (PHE) publishes the Green Book[3] online which contains all the latest information on vaccines and vaccination procedures for all the vaccine preventable infectious diseases that may occur in the UK. It is recommended that anyone involved in vaccinations should use this as a source to keep themselves up to date as well as the regular DH Vaccine Update newsletters.

The national childhood vaccination schedule in England has been developed and is regularly altered as a result of JCVI advice[4]. These vaccines are available free of charge to all eligible children. Up until 1st April 2013, Primary Care Trusts (PCT) across England were responsible for commissioning this service as well as the adult vaccination programmes. From 1st April 2013, the responsibility for commissioning

[1] Ten Great Public Health Achievements Worldwide, 2001—2010 CDC Weekly June 24, 2011 / 60(24);814-818 http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6024a4.htm
[2] Andre et al (2008) Vaccination greatly reduces disease, disability, death and inequity worldwide. http://www.who.int/bulletin/volumes/86/2/07-040089/en/
[3] https://www.gov.uk/government/organisations/public-health-england/series/immunisation-against-infectious-disease-the-green-book
[4] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/147613/dh_122401.pdf.pdf

vaccination programmes transferred to NHS England. Vaccination has been identified as a priority by Public Health England for 2013/14[5].

In Hampshire the majority of childhood vaccination services are commissioned from general practitioners as part of the National Health Service Act 2006 The Primary Medical Services (Directed Enhanced Services) (England) Directions 2010. This ensures that all children from two months of age to 18 can be offered vaccination against 10 vaccine preventable diseases (11 for girls). School nurse teams, pharmacies and acute services also provide vaccination services across Hampshire, described below.

- Neonatal hepatitis B vaccine and tuberculosis vaccine (known as BCG) are given to 'at risk' babies according to national guidance and are given as soon as possible after birth. The acute trusts (hospitals) are commissioned to deliver both these vaccines via the maternity service specification.
- The school nursing service for Hampshire, provided by - Southern Health NHS Foundation Trust (SHFT) and Hampshire Hospitals NHS Foundation Trust (HHFT) deliver the annual HPV vaccination programme. The Human Papilloma Virus (HPV) vaccine, introduced in September 2008, provides protection against cervical cancer. Cancer of the cervix is predominantly (70% of cases) caused by HPV types 16 and 18. HPV vaccine protects against these types by stopping the virus from developing in the body and provides the opportunity to prevent a very serious disease that affects over 3000 women every year in the UK and causes over 1000 deaths.
- The Teenage Booster vaccine Td/IPV (tetanus, diphtheria and polio) is provided by general practices across Hampshire under the terms of either their GMS or PMS contracts. Exceptions are Basingstoke, Hart and Rushmoor where it is either provided by school nurses. Across Avon Valley and Mid-Hants twenty one General practices are commissioned via a local enhanced service (LES).
- As well as general practices, pharmacies have been commissioned to provide the seasonal Influenza vaccination for those in identified clinical 'at risk' groups. Pneumococcal vaccine for the over 65s is also provided by general practices and is usually offered during the seasonal influenza programme.

Data capture is an important aspect of every vaccination programme to determine uptake, calculate risk of disease and to enable PHE to model future need. Data flow between providers (those giving the vaccinations) and the Child Health Records Department (CHRD) is essential and necessary for the success of the central RiO Child Health Information System call and recall function. Data are sent on paper to the nearest CHRD office where they are manually uploaded and stored in the data warehouse.

Table 1 contains the national routine immunisation schedule for England as of 1st May 2013.[6]

[5] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/192676/Our_priorities_final.pdf
[6] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/181040/8024_Imm_schedule_poster_A4-II.pdf

2. Level of need in the population

In 2009 there were 14,641 births in Hampshire (down from 14,677 in 2008). Trends over the past ten years suggest a gradual rise in the number of births in Hampshire from 13,320 in 2000 to 14,641 in 2009 (an increase of 9%). It is forecasted that the birth rate will drop to 14,505 in 2015 and slowly increase to 14,570 in 2017[7].

Table 1: National routine immunisation schedule for England

When to immunise	Diseases protected against	Vaccine given
Two months old	Diphtheria, tetanus, pertussis (whooping cough), polio and *Haemophilus influenzae* type b (Hib) Pneumococcal infection	DTaP/IPV/Hib + Pneumococcal conjuga vaccine, (PCV)
Three months old	Diphtheria, tetanus, pertussis, polio and *Haemophilus influenzae* type b (Hib) Meningitis C	DtaP/IPV/Hib + MenC
Four months old	Diphtheria, tetanus, pertussis, polio and *Haemophilus influenzae* type b (Hib) Meningitis C Pneumococcal infection	DtaP/IPV/Hib + MenC + PCV
52 weeks of age but AFTER 1st birthday	*Haemophilus influenza* type b (Hib) / Meningitis C Measles, mumps and rubella Pneumococcal infection	Hib/MenC MMR + PCV
Three years and four months or soon after	Diphtheria, tetanus, pertussis and polio Measles, mumps and rubella	DtaP/IPV or dTaP/IPV +MMR
Girls aged 12 to 13 years	Cervical cancer caused by Human Papillomavirus types 16 and 18.	HPV
13 to 18 years old	Diphtheria, tetanus, polio	Td/IPV

There are particular groups of children who are known to be at a higher risk of not being vaccinated. These include:

[7] HCC LA Birth Forecast 25.07.2011

- looked after children
- those with physical or learning disabilities
- children of teenage or lone parents
- those not registered with a GP
- younger children from large families
- children who are hospitalised or have a chronic illness
- those from some minority ethnic groups
- those from non-English speaking families
- vulnerable children, such as those whose families are travellers, asylum seekers or are homeless.

There are 357 children of Gypsy or Traveller heritage in Hampshire accounting for 2.4% of the school population.[8] The number of 'children in care' in Hampshire is increasing in line with national trends (see Children and Young People's chapter for more information).

3. Projected service use and outcome in 3-5 years and 5-10 years

The birth forecast for Hampshire shows an expected decrease from 14,965 births in 2010 to 14,570 in 2017. Therefore need for these services will vary accordingly.

4. Current services in relation to need

The target uptake rate for all the childhood vaccinations is 95%. The exceptions to this are HPV vaccine and Teenage Booster vaccine which have a target of 90%.

4.1 Childhood vaccination

Payments for childhood vaccinations are for a 90% or 70% uptake for 2 and 5 year olds and are calculated according to GP practice list size. This falls short of the WHO and DH 95% target and thus Hampshire general practices have no incentive to achieve the WHO recommendation. Therefore it could be suggested that insufficient activity has been commissioned. It is not possible to alter this situation at a local level while the current GP contract system remains, as the general practices are commissioned to provide this as part of their GMS contract.

Table 2 shows the vaccination summary report for January to March 2012. Data for these reports are collected quarterly from the child health information systems and a Cover of Vaccinations Evaluated Rapidly (COVER) return made by the Primary Care Trusts to PHE (formally the Health Protection Agency). The COVER return for Hampshire for Q4 2011/12 shows that the uptake at 5 years of age exceeds the 95% target for 3 vaccines but falls short of the 95% for a further three.

Caution is needed when looking at performance in relation to the COVER data and the impact on population health. COVER data provide a snap shot of vaccination uptake at a particular point in time. It does not provide the true uptake rates and the

[8] Hampshire's Ethnic Minority and Traveller Attainment Service (EMTAS) 2011/2012 Information booklet for Hampshire maintained schools

subsequent impact on health of the individual and community. The uptake rate at 6 years of age gives a more accurate picture, and is discussed in the section below.

Table 2: HPA South East Region Immunisation Coverage Report January-March 2012[9]

	Jan - Mar 2012	12 Months				24 Months				5 Years						
SHA	PCT	No. of children	DTaP/IPV/ Hib	MCCV	PCV	No. of children	DTaP/IPV/ Hib	MCCV	MMR	No. of children	DT/ Pol	Hib	MCCV	MMR 1	MMR 2	DTaP/ IPV Booster
South Central	Berkshire East	1,522	93.2	93.2	93.2	1,497	95.9	94.5	90.9	1,493	93.8	94.4	91.9	93.2	85.9	87.0
	Berkshire West	1,594	95.7	93.2	94.9	1,631	96.4	93.8	94.7	1,561	94.9	95.1	92.0	93.9	90.3	91.6
	Buckinghamshire	1,595	98.2	96.1	97.9	1,588	99.1	98.0	95.8	1,571	98.9	95.5	94.3	98.8	91.6	95.4
	Hampshire	3,760	95.4	94.8	94.9	3,751	96.9	96.0	94.5	3,736	96.4	96.5	95.4	93.3	89.8	91.1
	Isle of Wight Healthcare	307	94.7	90.6	91.5	353	96.3	92.4	91.8	310	93.9	92.6	91.6	90.6	82.3	83.9
	Oxfordshire	2,124	96.9	94.6	96.5	2,027	97.6	97.6	95.3	1,941	96.9	97.3	96.2	95.5	91.8	93.0
	Portsmouth City Teaching	644	94.7	94.1	94.9	696	96.8	97.0	95.5	629	95.2	95.4	94.6	92.5	85.1	86.8
	Southampton City	871	96.0	95.9	95.9	863	96.9	95.2	95.6	698	96.4	96.0	94.4	95.4	91.0	93.0
	South Central SHA	12,417	95.8	93.8	95.4	12,406	97.1	95.9	94.3	11,939	96.2	96.0	94.3	94.5	89.3	91.0
	England	165,813	94.7	94.1	94.5	166,320	96.3	95.3	92.0	157,945	95.6	95.2	93.1	93.4	86.9	88.0

≥ 95% coverage.

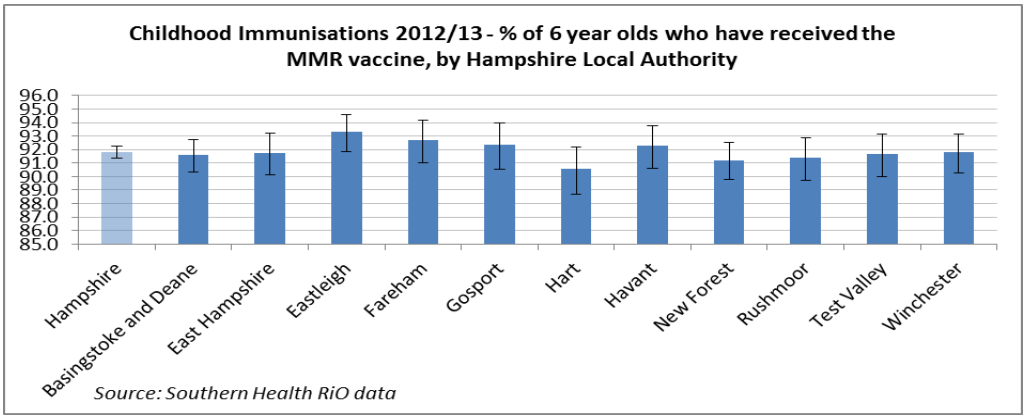
4.1.1 MMR vaccine

The MMR vaccine was introduced in October 1988 with a second dose being introduced in 1996. A single dose offers around 95% protection and two doses offer >99% protection. The first MMR vaccination is given at 13 months old and a booster at about 3 1/2 years of age. Coverage at two years of age fell to around 80% in 2003/04 following media concerns around a now disproved possible link between autism and the MMR vaccine[10]. Figure 1 shows the uptake of MMR2 for 6 year olds in Hampshire in 2012/13. This shows that Hart had the lowest uptake at 90.54% and Eastleigh the highest at 93.33%. Further analysis of the data showed that 915 children were recorded as only having had the second dose of MMR therefore could not be included, whilst 358 children had more than 3 MMR vaccines recorded against their name.

The following actions should be considered:

- Improve data recording accuracy by CHRD.
- Encourage parents to get their children vaccinated on time.

Figure 1: Uptake of completed course of MMR vaccine for 6 year olds in Hampshire for 2012/13

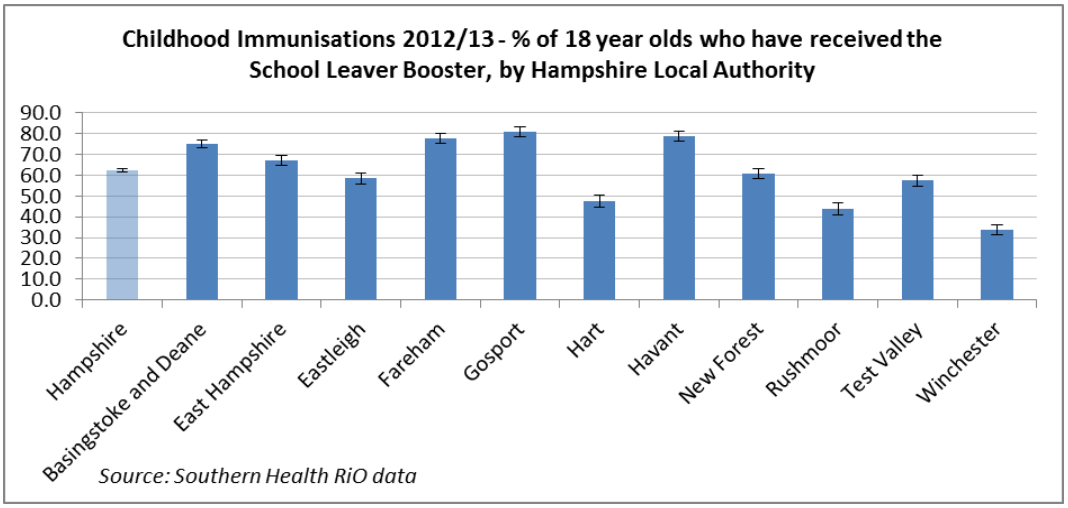


[9] http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1211441442288
[10] http://www.bmj.com/content/342/bmj.c7452.full

4.1.2 Teenage Booster

The teenage booster provides protection against tetanus, diphtheria and polio (Td/IPV). It is available for all young people aged between 13 and 18 years of age and is provided by GPs or school nurses across Hampshire. The DH target uptake for this vaccination is 90% and it is clear from figure 2 that the overall Hampshire rate falls significantly short of this at 62.41%. Winchester district had the lowest recorded uptake at 33.80% and Gosport had the highest at 80.92%.

Figure 2: Uptake of Teenage Booster Vaccine amongst 18 year olds in Hampshire for 2012/13



The following actions should be considered:

- GPs should have a robust call and recall system for this vaccination.
- Data flow from practices to CHRD should be improved.
- School nurse teams should ensure all eligible children are vaccinated before they leave school.
- Clinical Commissioning Groups and NHS England Wessex should target areas with low performance rates. This is particularly important as from summer 2013 the second dose the Meningitis C vaccine will be given at the same time as the Teenage Booster vaccine.

4.1.3 Human Papilloma Virus Vaccine

The HPV vaccine is offered to all girls in school year 8 by school nurses. Three doses are required and the course should be completed within a year of the initial dose. Table 3 shows that the uptake rate for completed course of the vaccination in 2011/12 was 85.1%. This falls short of the DH 90% target, however this is not a cause for concern. Since the programme was introduced the 90% target has been consistently achieved not in the required academic year, but in the subsequent year after mop-up clinics were held to capture girls who started the course late. For example in 2009/11 the initial reported uptake rate was 76.32 %; however this rose to 91.5% by the end of the subsequent academic year.

Table 3: HPV vaccination uptake rates in Hampshire, 2011/12

2011/12	Dose 1	Dose 2	Dose 3
HPV Vaccine	96.3%	95.2%	85.1%

The following action should be considered:

- School nurse teams should target schools with delayed uptake.

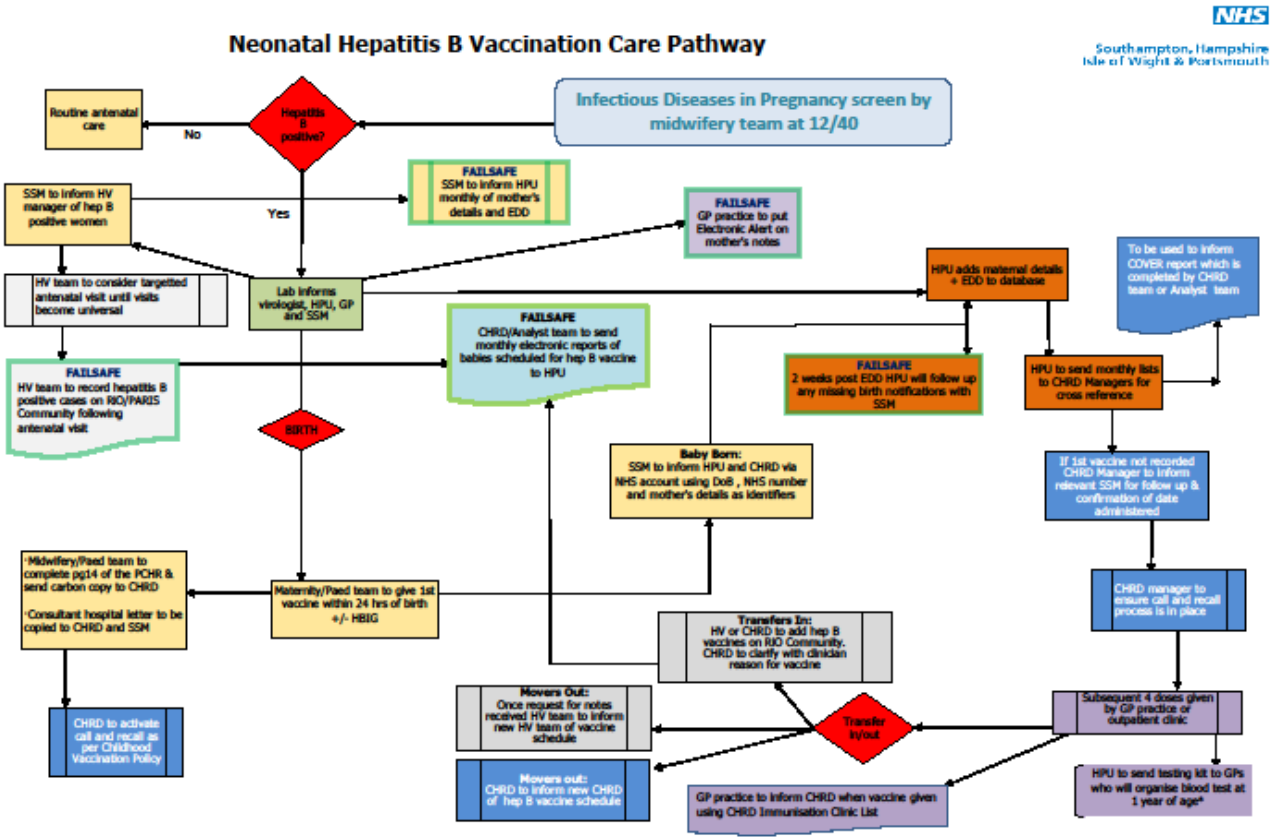
4.1.4 Neonatal Hepatitis B vaccination

Neonatal hepatitis B vaccination is offered to babies deemed 'at risk'. This means that any baby born to a woman who has been identified as hepatitis B positive on antenatal screen will be offered the vaccination at birth. The vaccination course for these babies consist of 5 doses, the first being given as soon as possible after birth and the final one being given just before school commences. Following a review of practice in Hampshire during 2011/12 it was identified that not all of these babies were receiving the full course of vaccination and neither was the vaccine being administered on time. This places the child at unnecessary risk of becoming infected with hepatitis B and increases the risk of long-term health problems such as cirrhosis of the liver and liver cancer. A new pathway was agreed and a database created to monitor positive mothers and follow up vaccination of their babies (figure 3). The database is currently managed by Wessex PHE Centre and within a year accurate data will be available for reporting on COVER.

The following action should be considered:

- NHS England (Wessex) should ensure that the hep B pathway is being adhered too and to ensure this data is available for quarterly COVER report.

Figure 3: Neonatal Hepatitis B pathway in Hampshire



4.2 Children Looked After

Figure 4 and table 4 show there has been a substantial increase in the proportion of Children Looked After (CLA) who have been in care for 12 months or more receiving all their immunisations. These improvements over the last four years are a result of efforts made by the Designated Nurse for Children in Care and Hampshire County Council Health of Children in Care Sub group to achieve the 95% target.

Figure 4: Immunisations in Children Looked After in Hampshire 2010-2013

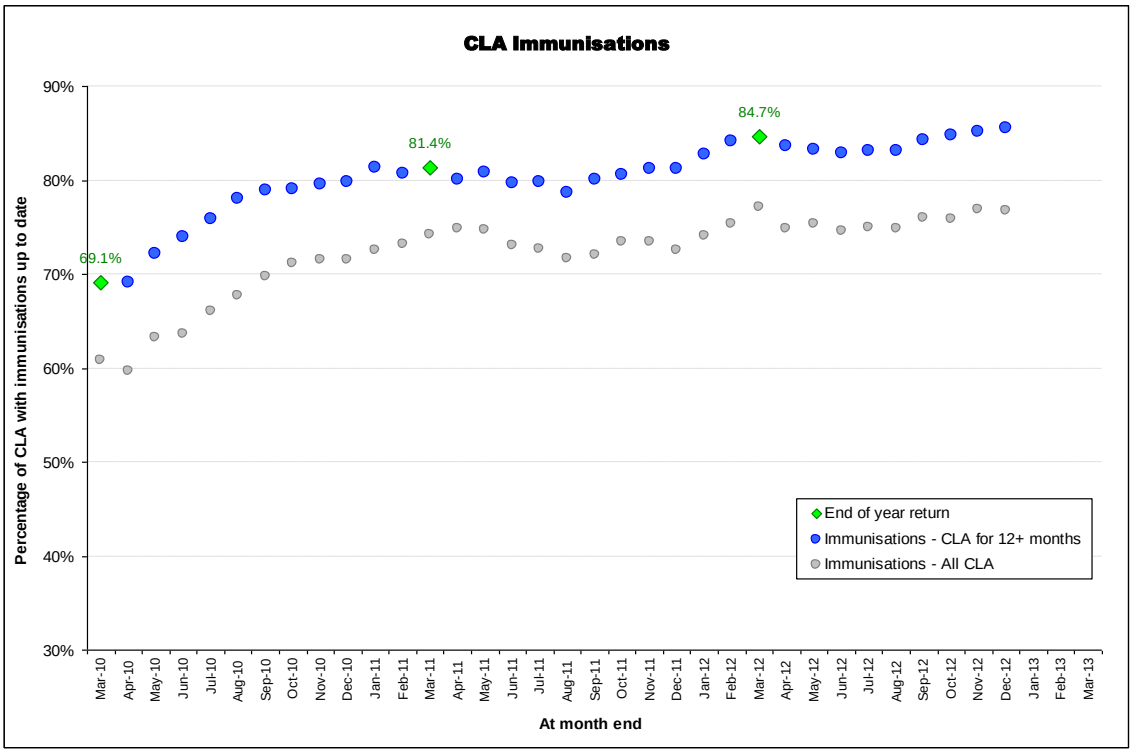


Table 4: Vaccination uptake of children who have been looked after continuously for at least 12 months 2012[11]

	At least 12 months	Number of vaccines up to date	%
Hampshire	760	640	84.2
England	46,590	38720	83.1

The following action should be considered:

- NHS England (Wessex) Screening and Immunisation lead should work closely with the Designated Nurse to continue working towards achieving the national target of 95%.

4.3 Seasonal Flu vaccination

The seasonal flu vaccination programme runs annually from September to March. Uptake in Hampshire for the 65 year old and over cohort was 0.2% short of the 75% target (table 5).

[11] https://www.gov.uk/government/publications/outcomes-for-children-looked-after-by-local-authorities-in-england-31-march-2012

Table 5: Seasonal Flu vaccine 2011/12

Flu vaccination > 65 years old						
	2011/12			2012/13		
	No. eligible patients	No. vaccinated	%	No. of eligible patients	No. vaccinated	%
Hampshire	253,788	190,637	75.1	256,799	192,165	74.8
England			74.0			73.4

Despite more than 1500 extra vaccines being given in 2012/13 compared with 2011/12, the vaccination rate fell by 0.3%. The number of people in the 65+ age group actually rose by more than 3,000 within this timeframe which is likely to be a result of an ageing population rather than an influx of new residents to Hampshire. This age group is likely to continue to grow and commissioners (NHS England (Wessex)) should ensure that services are available to meet this need in the future.

The under 65 'at risk' groups were targeted by Hampshire PCT during 2012/13 flu season to help improve uptake. Maternity units were not commissioned to deliver the seasonal flu vaccine to pregnant women due to current demands on the service, but they did engage in active promotion of the programme. Pharmacies throughout Hampshire were offered the opportunity to provide a vaccination service, increasing choice and availability for residents. Fifty eight pharmacies signed up to this local enhanced service and delivered 1,473 vaccines mainly to people with chronic respiratory disease. This increased overall uptake for these 'at risk' residents to 55.3%; however it remains short of the 70% DH target. 'At risk' groups are a difficult to reach group - none of the top 5 performing practices in Hampshire reached the target for chronic respiratory disease with the largest shortfall being seen amongst people with chronic liver disease (figure 5).

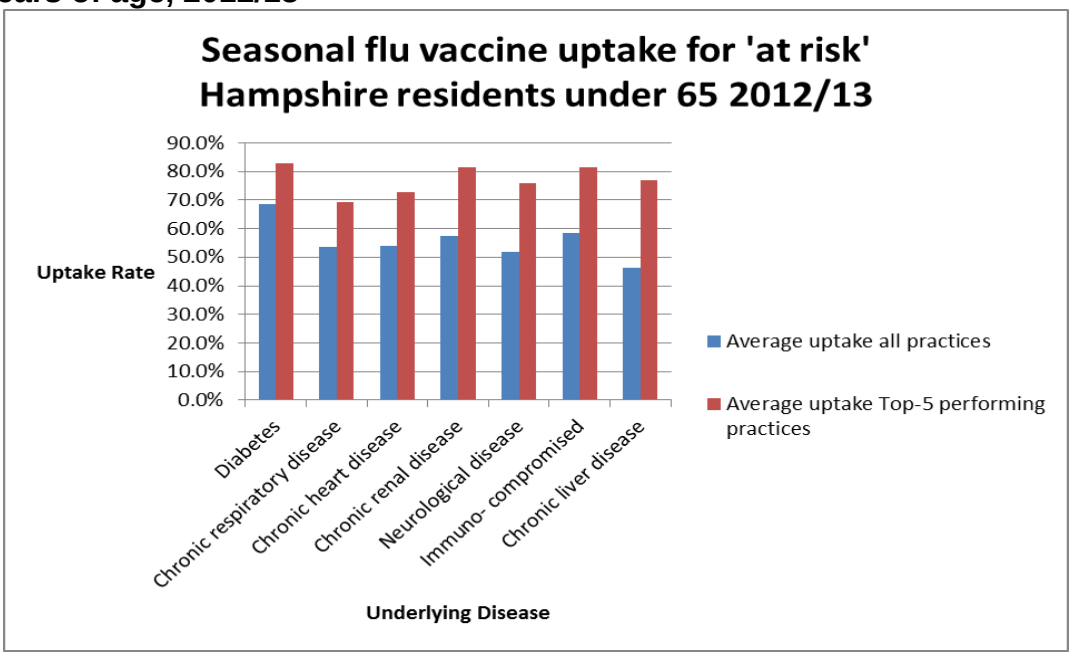
Improving uptake of seasonal flu vaccine amongst 'at risk' groups is an area that needs improvement, and was identified as a priority in the Chief Medical Officer's annual report 2011[12]. The pharmacies had a delayed start to delivering this programme which may have had a negative impact on overall vaccination rate. However some pharmacies are now planning to start the 2013/14 flu vaccination programme as early as August 2013.

The following action should be considered:

- CCGs to work with GPs with low uptake amongst the 'at risk' groups.
- Commissioners (NHS England (Wessex) to consider the benefits of using pharmacies to deliver this programme.

[12] http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_134779.pdf

Figure 5: Seasonal flu vaccine uptake for 'at risk' Hampshire residents under 65 years of age, 2012/13



4.4 Pneumococcal vaccine

Pneumococcal vaccine (PPV) protects against pneumococcal disease caused by the bacterium Streptococcus pneumonia. Vaccination is recommended for all individuals aged over 65 years because they are at higher risk of complications. The vaccine is given once to this age group, usually at the same time as the seasonal flu vaccine. The uptake rate in Hampshire is over the recommended level and is higher than that for England. See Table 6 for further details.

Table 6: Proportion of people aged 65 years and over who have received pneumococcal vaccine at any time until 31/03/2011

	Aged 65	65 only	66-74	75+
Hampshire	75.5%	39.2%	72.1%	84%
England	70.5%	35.1%	67.1%	79.3%

4.5 Pregnancy pertussis (whooping cough) programme

Following a rise in the number of cases of whooping cough in young babies and some avoidable deaths, the Chief Medical Officer Professor Dame Sally Davies announced in September 2012 that pregnant women would be offered pertussis vaccination to protect their newborn babies. The premise of this programme was to boost the maternal antibody level and enable the mother to transfer a high level of pertussis antibodies across the placenta to her unborn child, to passively protect her infant against pertussis until he/she is due the first dose of primary immunisations at 2 months of age. General practices were commissioned in Hampshire to deliver this programme to all pregnant women over 28 weeks gestation. In March 2013 the uptake rate for the temporary antenatal pertussis programme was 79.4% which compares favourably to the England uptake of 59.4%.[13]

[13] http://media.dh.gov.uk/network/211/files/2013/03/PertussisUptake_Jan2013_acc.pdf

4.6 Future programmes

The DH is planning four new changes to the current vaccination schedule to be implemented in 2013/14. These are:

- **Rotavirus**: This oral, live vaccine will be given at 2 and 3 months. It is expected to be introduced in June/July 2013.
- **Seasonal Flu**: All children aged 2-16 years will be offered a live intra-nasally administered flu vaccine annually. This will be introduced in stages. The first stage will see an extension to the programme for all 2 year olds in 2013/14. There will also be a pilot for 2-10 year olds but it is not anticipated that Hampshire will be part of this pilot. The programme will then extend to all 2-10 year olds in 2014/15. This pattern will be repeated to eventually include 16 year olds.
- **Meningitis C**: From June 2013, changes to the current schedule for administering the MenC conjugate vaccine. The second priming dose currently given at four months will be replaced by a booster dose given in adolescence. The initial change will be to cease giving the four month dose from 1 June 2013.
- **Herpes Zoster**: From September 2013, the introduction of a shingles vaccine for people aged 70 years (routine cohort) and 79 years (catch-up cohort) to protect against herpes zoster.
- **Meningitis B**: This will be considered by the JCVI in the summer for inclusion in the UK vaccination programme

Full details will be provided in a series of 'Tripartite Public Health' official letters, formerly CMO letters, introducing each programme.

5. Evidence of what works

All vaccinators should complete a training course which is run to the guidelines set by the HPA[14]. Locally a two day course is provided by SHFT Leadership, Education and Development department as well as one day update sessions.

The Green Book has the latest information on vaccines and vaccination procedures for all the vaccine preventable infectious diseases that may occur in the UK. Health professionals and immunisation practitioners are expected to keep up to date with developments in the field and updates to the Green Book[15] through the regular Vaccine Update news.[16]

Evidence of what works to help improve the uptake of childhood vaccinations is set out in the NICE (2009) PH21 Reducing the differences in the uptake of immunisation.[17]

[14] http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1196942164323
[15] https://www.gov.uk/government/organisations/public-health-england/series/immunisation-against-infectious-disease-the-green-book
[16] https://www.gov.uk/search?q=Vaccine+Update&tab=government-results
[17] http://www.nice.org.uk/nicemedia/live/12247/45497/45497.pdf

Table 7: Improving the uptake of childhood vaccinations

No.	What Works	Current Status
1	Data validation	Work ongoing with SHFT Business Team and NHS South CSU CCG ICT
2	Proof of vaccination upon entry to nursery and school	Links made with Children Centres. In service spec with School nurse teams
3	Ensure professionals are aware that young people aged 16 and 17 years can be offered the capacity to consent to immunisations.	Discussed with school nursing teams
4	Each professional group involved in immunisations to show leadership and nominate an Immunisation Champion within each team	Part of Imms Policy SHFT has nominated a Manager for this role
5	GPs and Health Visitors to provide additional support to those working with children who are at increased risk of not being immunised	Defined within Immunisation Policy
6	Importance of information sharing and communication between health and social care services to ensure looked after children's records are passed on if they move	Led by Designated Nurse for Children in Care
7	Centralised call and recall system with phone calls if the appointment is missed significantly increases the number of infants up-to-date with immunisations	Detailed within Immunisation Policy
8	Targeted home visits for persistent non-attenders	This does not happen currently
9	Time given to parents to discuss concerns	Need highlighted within Immunisation Policy
10	Opportunistic vaccination by school nurses, health visitors, practice nurses and GPs.	This does not happen
11	Flexible clinic times.	Usually offered as defined in Immunisation Policy
12	All professionals (GPs; HV; School Nurses; Practice Nurses; Midwives) involved in childhood immunisations to ensure they are up to date with current guidance and research.	Training provided by SHFT for anyone involved in vaccinations with a section built in specifically for admin staff
13	Providing uptake figures to practice staff	This happens on a quarterly basis

6. Recommendations

6.1 General - Commissioners

- Ensure payment pathway based on performance is maintained.
- Ensure performance is measured and actioned according to the pathway.
- Ensure data validation process is agreed and implemented.
- Ensure adequate occupational health provision is offered to all staff working in health and social care.
- Proactive immunisation promotions throughout the year using local data.
- Support the national realignment of target levels with payment levels.
- Work with GP Practices with hard to reach groups such as Gypsy & Travellers to provide flexible access to services and consider other means of accessing these groups of people.
- Ensure neonatal hepatitis B vaccination pathway is maintained and data is provided for the quarterly COVER returns.

- Ensure that the hepatitis B pathway is being used and that the data is available for the quarterly COVER report.

6.2 Seasonal flu - Commissioners

- Increase uptake amongst ‘at risk’ groups by expanding the number of providers and times of availability.
- Engage with maternity staff and provide annual updates for internal training purposes.
- Increase uptake amongst healthcare and social care staff.
- Ensure pharmacy provision in areas of poor uptake and to provide outreach to hard to reach groups such as Gypsy &Travellers.
- To work with school nurse teams to prepare for the expansion of flu vaccination programme.
- GPs to have a robust call and recall system for this vaccination.
- Improve data flow from practices to CHRD.
- Consider use of a pharmacy LES in 2013/14 season.

6.3 Teenage Booster vaccine - providers

- Practices with low uptake to think of innovation ways of improving uptake.
- School nurse to look at the number of children vaccinated in their final year of school and provide mop up clinics accordingly.
- General practices in particular areas should target the needs of hard to reach communities. For example Gypsy and Traveller groups across the county, including those living in bricks and mortar accommodation.
- General practitioners should be able to deliver ad hoc vaccinations.