Department of Health | Public Health England | NHS England

20 March 2017

Dear colleague,

The national flu immunisation programme 2017/18

1. We would like to thank everyone for their hard work in supporting the national flu immunisation programme and the significant contribution this makes to reducing illness and death from flu.

2. This letter provides the information needed to prepare for the programme in 2017/18.

Eligibility

3. Groups eligible for flu vaccination are based on the advice of the Joint Committee on Vaccination and Immunisation (JCVI). The national flu immunisation programme aims to provide direct protection to those who are at higher risk of flu associated morbidity and mortality. This includes older people, pregnant women, and those with certain underlying medical conditions. In 2012 JCVI recommended extending vaccination to children to provide both individual protection to the children themselves and reduce transmission across all age groups. JCVI recommended that children are offered a live attenuated influenza vaccine (LAIV), administered as a nasal spray.

4. In 2017/18 the following are eligible for flu vaccination:
   - all children aged two to eight (but not nine years or older) on 31 August 2017 (with LAIV)
   - all primary school-aged children in former primary school pilot areas (with LAIV)
   - those aged six months to under 65 years in clinical risk groups
   - pregnant women
   - those aged 65 years and over
   - those in long-stay residential care homes
   - carers

5. Frontline health and social care workers should be provided with flu vaccination by their employer. This should form part of the organisations' policy for the prevention of transmission of infection (flu) to help protect patients, residents, and service users as

PHE Gateway Ref: 2016697
NHS England Gateway Ref: 06559

well as staff and their families. This includes staff in all NHS trusts, general practices, care homes, and domiciliary care.

6. The influenza chapter in 'Immunisation against infectious disease' (the 'Green Book') gives detailed descriptions of eligible groups and guidance for healthcare workers on administering the flu vaccine.

7. In 2017/18 changes to the programme are as follows:

    - **Morbidly obese**: Vaccination of the morbidly obese (defined as BMI of 40 and above) will attract a payment under the directed enhanced services (DES) in 2017/18.

    - **Reception Year (children aged 4-5 years)**: These children will now be offered flu vaccination (LAIV) in reception class, rather than through general practice. No payment will be made under the DES if they are vaccinated in general practice (unless the child is in an at risk group);

    - **School Year 4 (children aged 8-9 years)**: As part of the phased roll-out of the children's programme, this year children in school year 4 will also be offered the vaccination.

8. Delivery through the Community Pharmacy Seasonal Influenza Vaccination Advanced Service will continue in 2017/18. Eligible adults aged 18 years and over will have the choice of getting their flu vaccine at a pharmacy.

9. All those eligible should be given flu vaccination as soon as vaccine is available so that people are protected when flu begins to circulate. Vaccination should therefore be completed by the end of December before flu circulation usually peaks. However, clinical judgement should be applied to assess the needs of individual patients as it is often appropriate to continue to offer vaccination from January to March to those who are unvaccinated. This can be particularly important if it is a late flu season or when newly at risk patients present, such as pregnant women who may have not been pregnant at the beginning of the vaccination period. The enhanced service specification for flu therefore includes payment for vaccines given up until 31 March 2018. The decision to vaccinate should take into account the level of flu-like illness in the community, bearing in mind that the flu season can be late and that the immune response to vaccination takes about two weeks to develop fully.

Vaccine uptake ambitions

10. The long-term ambition is that in most eligible groups for whom flu vaccination provides direct protection, a minimum 75% flu vaccine uptake rate is achieved. As the next step to achieving this, vaccine uptake ambitions for 2017/18 are set out below. In

the case of at risk groups the ambition is expressed as interim because current uptake is some way from the 75% target.

11. As a key objective in the children's programme is reduction of flu transmission, the ambition beyond 2017/18 will be based on levels of vaccine uptake needed to achieve this impact.

Table: Vaccine uptake ambitions

Eligible groups	**Uptake ambition**
Routine programme	
Aged 65 years and over	**75%**, reflecting the World Health Organization (WHO) target for this group.
Healthcare workers	The trust-level ambition is to reach a minimum **75%** uptake and an improvement in every Trust. In 2017/18 there continues to be a financial incentive to reach this target in the form of the CQUIN (see appendix D). It is expected that primary care providers aim to achieve this ambition as well.
Aged under 65 'at risk', including pregnant women	**In 2017/18 at least 55% in all clinical risk groups,** and maintaining higher rates where those have already been achieved. Ultimately the aim is to achieve at least a 75% uptake in these groups given their increased risk of morbidity and mortality from flu.
Children's programme	
Children aged 2 – 8 years	**In 2017/18 uptake levels between 40- 65%** to be attained by every provider. The ambition is expressed as a range because, to date, uptake among pre-school children has been lower than among those at school. This ambition will be reviewed in future seasons.

12. Providers should actively invite (e.g. by letter, email, phone call, text) 100% of eligible individuals and ensure uptake is as high as possible. Providers and commissioners will be required, if asked, to demonstrate that such an offer has been made. The benefits of the vaccine among all recommended groups should be communicated and vaccination made as easily accessible as possible by providing it in a convenient setting, for example in maternity clinics to increase uptake amongst pregnant women.

Children's programme

13. Evidence from the children's programme has showed a positive impact on flu transmission across a range of surveillance indicators from vaccinating children of primary school age. Since the introduction of the LAIV programme for children, the vaccine effectiveness for laboratory confirmed infection has been good and JCVI has recommended that the UK continues with the programme (see appendix C).

14. The children's programme for 2017/18 will be delivered as follows:
    - two and three year-olds (but not four years or older on 31 August 2017) will be vaccinated by general practice;
    - four to eight year-olds (but not nine years or older on 31 August 2017), that is those in reception class and school years 1 -4, will be vaccinated in school;
    - all primary school-aged children in former primary school pilot areas will continue to be offered vaccination in schools.

15. It is the child's age on the 31 August 2017 that defines their eligibility (see table on pages 16-17). This means that in general practice:
    - children who turn two years-old after this date are **not** eligible for vaccination
    - children who turn four years-old after this date **are** eligible for vaccination (as these children will not yet have entered formal primary school education)

    and in schools:
    - those children becoming 9 years old on or after 1 September 2017 **are** eligible (as they will be in Year 4).

16. In schools, all children within eligible year groups should be offered vaccination even if their age falls outside the birth cohorts specified in paragraph 14. So if a child has been accelerated or held back a year they will be vaccinated with their peers. Children within the relevant birth cohorts who are home schooled will also be offered vaccination.

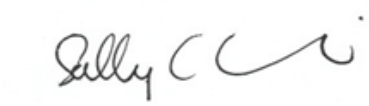
17. At risk children who are eligible for flu vaccination via the school-based programme may be offered vaccination in general practice if the school session is late in the season, parents prefer it, or if the child was absent on the day vaccination was offered in school.

Conclusion

18. Morbidity and mortality attributed to flu is a major cause of harm to individuals, especially vulnerable people, and a key factor in NHS winter pressures. The annual flu immunisation programme helps to reduce GP consultations, unplanned hospital admissions and pressure on A&E and is therefore a critical element of the system-wide approach for delivering robust and resilient health and care services during winter.

19. This Annual Flu Letter has the support of the Chief Pharmaceutical Officer, the Chief Nursing Officer and the PHE Chief Nurse.

Yours sincerely,



Professor Dame Sally C Davies
Department of Health, Chief Medical Officer

Professor Paul Cosford
Public Health England, Medical Director and Director for Health Protection

Professor Sir Bruce Keogh
NHS England, National Medical Director

Links to other key documents

Document	Web link
National Flu plan	www.gov.uk/government/collections/annual-flu-programme
Green Book Influenza Chapter	www.gov.uk/government/publications/influenza-the-green-book-chapter-19
NHS England Public Health Functions Agreement 2017/18 (known as Section 7A agreement)	www.england.nhs.uk/commissioning/pub-hlth-res/
NHS England enhanced service specification (For GP providers)	www.england.nhs.uk/commissioning/gp-contract/
Immform Survey User guide for GP practices, local NHS England teams, and NHS Trusts Flu vaccine uptake figures	www.gov.uk/government/collections/vaccine-uptake
Flu immunisation PGD templates (Note: These templates require authorisation before use)	www.gov.uk/government/collections/immunisation-patient-group-direction-pgd
ImmForm website for ordering child flu vaccines	www.immform.dh.gov.uk
National Q&As / training slide sets/ e-learning programme	www.gov.uk/government/collections/annual-flu-programme www.e-lfh.org.uk/programmes/flu-immunisation/
Seasonal flu/influenza GP practice vaccination programmes supporting documents	www.nhsemployers.org/vandi201718
NHS England Commissioning for Quality and Innovation (CQUIN) Guidance for 2017/18 & 2018/19	www.england.nhs.uk/nhs-standard-contract/cquin/cquin-17-19/
Vaccine Update To **register** to receive the monthly newsletter by email please go to:	www.gov.uk/government/collections/vaccine-update https://public.govdelivery.com/accounts/UKHPA/subscribers/new?preferences=true
NHS Employers Flu Fighter campaign	www.nhsemployers.org/flu
PHE Immunisation home page	www.gov.uk/government/collections/immunisation
PHE Flu Immunisation Programme home page	www.gov.uk/government/collections/annual-flu-programme

Any **enquiries** regarding this publication should be sent to: immunisation@phe.gov.uk

Distribution list

General practices
NHS England heads of public health
NHS England heads of primary care
Screening and immunisation leads
NHS England regional directors
NHS England directors of commissioning operations
Heads of nursing
Heads of midwifery
Clinical Commissioning Groups Clinical Leaders
Clinical commissioning groups accountable officers
PHE centre directors
Directors of public health
Local authority chief executives
Directors of adult services
Directors of children's services
Local medical committees
Local pharmaceutical committees
Community pharmacies
Chief pharmacists of NHS trusts
NHS foundation trusts chief executives
NHS trusts chief executives
Chairs of health and wellbeing boards

Recipients to ensure cascade to all appropriate heads of profession and independent sector providers of NHS funded services.

For information:

Allied Health Professionals Federation
Community Practitioners and Health Visitors Association
Nursing and Midwifery Council
Royal College of Midwives
Royal College of Nursing
Academy of Medical Royal Colleges
Royal College of Anaesthetists
Royal College of Physicians
Royal College of Surgeons
Royal College of Obstetricians and Gynaecologists
Royal College of General Practitioners
College of Emergency Medicine
Faculty of Occupational Medicine
Royal College of Pathologists
Royal College of Ophthalmologists
British Medical Association
Royal Pharmaceutical Society
Association of Pharmacy Technicians UK
Pharmacy Voice
Pharmaceutical Services Negotiating Committee
Local Government Association
Association of Directors of Adult Social Services
Council of Deans of Health

List of appendices

Detailed planning information is set out in the following appendices:

Appendix A: Groups included in the national flu immunisation programme

1. In 2017/18, flu vaccinations will be offered under the NHS flu vaccination programme to the following groups:
    - all those aged two and three (but not four years or older) on 31 August 2017 (ie date of birth on or after 1 September 2013 and on or before 31 August 2015)
    - all children in reception class and school years 1, 2, 3 and 4[1]
    - all primary school-aged children in former primary school pilot areas
    - people aged from six months to less than 65 years of age with a serious medical condition such as:
        - chronic (long-term) respiratory disease, such as severe asthma, chronic obstructive pulmonary disease (COPD) or bronchitis
        - chronic heart disease, such as heart failure
        - chronic kidney disease at stage three, four or five
        - chronic liver disease
        - chronic neurological disease, such as Parkinson's disease or motor neurone disease, or learning disability
        - diabetes
        - splenic dysfunction
        - a weakened immune system due to disease (such as HIV/AIDS) or treatment (such as cancer treatment)
        - morbidly obese (defined as BMI of 40 and above)
    - all pregnant women (including those women who become pregnant during the flu season)
    - people aged 65 years or over (including those becoming age 65 years by 31 March 2018)
    - people living in long-stay residential care homes or other long-stay care facilities where rapid spread is likely to follow introduction of infection and cause high morbidity and mortality. This does not

[1] Reception Year is defined as four rising to five year olds (i.e date of birth between 1 September 2012 and on or before 31 August 2013)
Year 1 is defined as five rising to six year olds (i.e. date of birth between 1 September 2011 and on or before 31 August 2012)
Year 2 is defined as six rising to seven-year-olds (i.e. date of birth between 1 September 2010 and on or before 31 August 2011)
Year 3 is defined as seven rising to eight-year-olds (i.e. date of birth between 1 September 2009 and on or before 31 August 2010)
Year 4 is defined as eight rising to nine-year-olds (i.e. date of birth between 1 September 2008 and on or before 31 August 2009)
Some children in Reception year and years 1, 2, 3 and 4 might be outside of these date ranges (e.g. if a child has been accelerated or held back a year). It is acceptable to offer and deliver immunisations to these children with their class peers.

include, for instance, prisons, young offender institutions, or university halls of residence

- people who are in receipt of a carer's allowance, or those who are the main carer of an older or disabled person whose welfare may be at risk if the carer falls ill
- consideration should also be given to the vaccination of household contacts of immunocompromised individuals, specifically individuals who expect to share living accommodation on most days over the winter and, therefore, for whom continuing close contact is unavoidable

2. The list above is not exhaustive, and the healthcare practitioner should apply clinical judgement to take into account the risk of flu exacerbating any underlying disease that a patient may have, as well as the risk of serious illness from flu itself. Flu vaccine should be offered in such cases even if the individual is not in the clinical risk groups specified above.

3. It is also important that health and social care workers with direct patient/service user contact should be vaccinated as part of an employer's occupational health obligation.

Healthcare practitioners should refer to the Green Book influenza chapter for further detail about clinical risk groups advised to receive flu immunisation.
This is regularly updated, sometimes during the flu season, and can be found at: www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book

Appendix B: GP practice checklist

Practices are encouraged to implement the guidelines below which are based on evidence about factors associated with higher flu vaccine uptake[2].

Named lead

- Identify a named lead individual within the practice who is responsible for the flu vaccination programme and liaises regularly with all staff involved in the programme.

Registers and information

- Hold a register that can identify all pregnant women and patients in the under 65 years at risk groups, those aged 65 years and over, and those aged two to three years.
- Update the patient register throughout the flu season paying particular attention to the inclusion of women who become pregnant and patients who enter at risk groups during the flu season.
- Submit accurate data on number of patients eligible to receive flu vaccine and flu vaccinations given to its patients on ImmForm (www.immform.dh.gov.uk), ideally using the automated function. Submit data on uptake amongst healthcare workers in primary care using the ImmForm data collection tool.

Meeting any public health ambitions in respect of such immunisations

- Order sufficient flu vaccine taking into account past and planned improved performance, expected demographic increase, and to ensure that everyone at risk is offered the flu vaccine. It is recommended that vaccine is ordered from more than one supplier and in respect of children from PHE central supplies through the ImmForm website.

Robust call and recall arrangements

- Invite patients recommended to receive the flu vaccine to a flu vaccination clinic or to make an appointment (eg by letter, email, phone call, text). This is a requirement of the enhanced service specification.
- Follow-up patients, especially those in at risk groups, who do not respond or fail to attend scheduled clinics or appointments.

Maximising uptake in the interests of at-risk patients

- Start flu vaccination as soon as practicable after receipt of the vaccine. This will help ensure the maximum number of patients are vaccinated as early as possible and are protected before flu starts to circulate. Aim to complete immunisation of all eligible patients before flu starts to circulate and ideally by end of December.
- Collaborate with maternity services to offer and provide flu vaccination to pregnant women and to identify, offer and provide to newly pregnant women as the flu season progresses.
- Offer flu vaccination in clinics and opportunistically.
- Where the patient has indicated they wish to receive the vaccination but is physically unable to attend the practice (for example is housebound) the practice must make all reasonable effort to ensure the patient is vaccinated. The GP

[2] Dexter L *et al.* (2012) Strategies to increase influenza vaccination rates: outcomes of a nationwide cross-sectional survey of UK general practice. bmjopen.bmj.com/content/2/3/e000851.full

practice and/or CCG will collaborate with other providers such as community pharmacies and community or health and social care trusts to identify and offer flu vaccination to residents in care homes, nursing homes and house-bound patients, and to ensure that mechanisms are in place to update the patient record when flu vaccinations are given by other providers.

For guidance on improving uptake among children in general practice see 'Increasing influenza immunisation uptake among children': www.gov.uk/government/collections/annual-flu-programme

Appendix C: National extension of flu programme to children

Background

1. Following advice from JCVI the routine annual flu vaccination programme is being extended to include children in England (with similar schemes being taken forward in Wales, Scotland and Northern Ireland). This extension is being phased in over a number of years and plans beyond 2017/18 will be subject to the annual Section 7A agreement between the Department of Health and NHS England regarding public health functions.

2. Implementation of the programme began in 2013/14 with pre-school children offered vaccination through GP surgeries. For the first year the offer was to two- and three- year-olds, the following year it was extended to four-year-olds.

3. In addition, in 2013/14 a number of pilots started for primary school aged children offering flu vaccination. The pilots tested a variety of delivery methods and were mostly in primary schools, with some working through general practice and community pharmacies. In 2014/15, delivery of the vaccine was also piloted in children in years 7 and 8 (aged 11 to 13 years) in selected pilot areas for that year only.

4. Vaccinating children each year means that not only does it help protect the children themselves but there will be reduced transmission across all age groups, lessening levels of flu overall and reducing the burden of flu across the population. Research into the first two years of the programme compared the differences between pilot areas, where the entire primary school age cohort was offered vaccination, to non-pilot areas. The results have shown a positive impact on flu transmission across a range of surveillance indicators from vaccinating children of primary school age. These include reductions in: GP consultations for influenza-like illness, swab positivity in primary care, laboratory confirmed hospitalisations and percentage of respiratory emergency department attendances[3,4].

[3] Pebody, R *et al*. 5 June 2014. Uptake and impact of a new live attenuated influenza vaccine programme in England: early results of a pilot in primary school age children, 2013/14 influenza season. *Eurosurveillance*, **19**, Issue 22. www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20823

[4] Pebody, R *et al*. October 2015. Uptake and impact of vaccinating school age children against influenza during a season with circulation of drifted influenza A and B strains, England, 2014/15. *Eurosurveillance,* 20 (39). www.eurosurveillance.org/images/dynamic/EE/V20N39/art21256.pdf

Children eligible for flu vaccination in 2017/18

5. All two- and three-year olds (but not four years or older) on 31 August 2017 will continue to be offered flu vaccination through GP surgeries. This year four-year-olds will be offered flu vaccination by school based providers, not general practice.

6. In 2017/18 the programme is being extended to school year 4 so that all children in reception year and school years 1 - 4 (aged 4-5, to 8-9 year olds) will be offered flu vaccination. Provision will normally be in primary school settings apart from one or two areas in the country where NHS England local teams will make alternative arrangements. All primary school aged children from reception class through to year 6 in former school pilot areas will be offered the vaccine.

7. At risk children who are eligible for flu vaccination via the school-based programme because of their age will be offered immunisation at school. However, these children may be offered vaccination in general practice if the school session is late in the season or parents prefer it.

8. Arrangements should be made to ensure that children who missed out on vaccination during the routine school session can be vaccinated, if requested. Precise arrangements for achieving this are for local determination. Children who are home educated should also be offered vaccination. Children will be invited by the provider to a mutually acceptable appointment venue. Local NHS England teams should be consulted for details about local arrangements. Contact details for the teams can be found at: www.england.nhs.uk/about/regional-area-teams/

9. Where a child is vaccinated but not by their GP, it is important that the vaccination information is provided to the practice for the timely update of clinical records and that the data is entered on the system.

Use of live attenuated influenza vaccine (LAIV)

10. The Green Book states that LAIV, administered as a nasal spray, is the vaccine of choice for children. The vaccine is licensed for those aged from 24 months to less than 18 years of age. JCVI recommended LAIV as it has:

    - good efficacy in children, particularly after only a single dose
    - the potential to provide protection against circulating strains that have drifted from those contained in the vaccine

- higher acceptability with children, their parents and carers due to intranasal administration
- it may offer important longer-term immunological advantages to children by replicating natural exposure/infection to induce better immune memory to influenza that may not arise from use of inactivated flu vaccines.

11. In August 2016 JCVI reviewed all the UK and other international evidence after data from the US found their LAIV childhood flu vaccination programme to be ineffective[5]. The 58% vaccine efficacy found in the UK in 2015/16 is good and within the normal range for this vaccine[6]. Over the three seasons from 2013/14, the overall vaccine effectiveness of LAIV was 53.1% (95% CI: 31.4–67.9). Other countries which have introduced LAIV, such as Finland, have also found similar results to the UK. The reasons for the poor efficacy of the vaccine in the US are not fully understood and remain under investigation, but the clear recommendation of JCVI was to continue with the LAIV vaccination programme, together with on-going intensive monitoring of the programme performance.

12. LAIV should be offered to all eligible children when not medically contra-indicated. This includes children in clinical risk groups. Children who are in clinical risk groups should be offered a suitable inactivated alternative vaccine if medically contraindicated to LAIV.

13. Children who are not in clinical risk groups should only be offered LAIV. A child who is unable to have LAIV, for reasons other than being medically contraindicated, will continue to derive benefit from the programme by virtue of the reduction of transmission among their peers. They will not be eligible for an inactivated vaccine.

14. LAIV is unsuitable for children with contraindications such as severe immunodeficiency, severe asthma or active wheeze. Following more evidence on the safety of LAIV in egg allergic children, JCVI amended its advice in 2015 that, except for those with severe anaphylaxis to egg which has previously required intensive care, children with an egg allergy can be safely vaccinated with LAIV in any setting (including primary care and schools); those with clinical

[5] The JCVI statement can be found at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/548515/JCVI_statement.pdf

[6] Pebody, R et al. 15 July 2016. Effectiveness of seasonal influenza vaccine for adults and children in preventing laboratory-confirmed influenza in primary care on the United Kingdom: 2015/16 end-of-season results. *Eurosurveillance*, **21,** Issue 38. www.eurosurveillance.org/ViewArticle.aspx?ArticleId=22592

risk factors that contraindicate LAIV should be offered an inactivated influenza vaccine with a very low ovalbumin content (less than 0.12 µg/ml).

15. Children with a history of severe anaphylaxis to egg which has previously required intensive care, should be referred to specialists for immunisation in hospital. LAIV is not otherwise contraindicated in children with egg allergy. Egg-allergic children with asthma can receive LAIV if their asthma is well-controlled.

16. For the full list of contraindications please see the Green Book. GPs should ensure that they have ordered sufficient supplies of suitable alternative inactivated injectable vaccines for at-risk children who cannot receive LAIV for medical reasons.

17. Eligibility and the type of vaccine to offer children under 18 is as follows:

Eligible cohort	**Which vaccine**		**Setting in which it is normally offered**	**Key notes**
	Children in clinical risk groups	**Children <u>not</u> in clinical risk groups**		
Six months to less than two years old	Offer suitable inactivated flu vaccine.	Not applicable.	General practice	Eligibility is based on age at which they present
Two and three years olds (but not four years or older) **on 31 August 2017***	Offer LAIV. If LAIV is medically contraindicated, then offer suitable inactivated flu vaccine.	Offer LAIV (unless medically contraindicated).	General practice	Children who turn two years of age **<u>after</u>** 31 August 2017 **are not** eligible Children who were three and turn four **<u>after</u>** 31 August 2017 **remain eligible**
Children in reception class and school years 1, 2, 3 and 4 (aged four to eight years **on 31 August 2017**)**	Offer LAIV. If LAIV is medically contraindicated, then offer suitable inactivated flu vaccine.	Offer LAIV (unless medically contraindicated).	School based provision	At risk children may be offered vaccination in general practice if the school session is late in the season or parents prefer it

Eligible cohort	Which vaccine		Setting in which it is normally offered	Key notes
	Children in clinical risk groups	**Children <u>not</u> in clinical risk groups**		
Children in school year 5 and above (aged nine years or older on 31 August 2017) and less than 18 years old	Offer LAIV. If LAIV is medically contraindicated, then offer suitable inactivated flu vaccine.	Not applicable.	General practice	

*Date of birth on or after 1 September 2013 and on or before 31 August 2015.

** Date of birth on or after 1 September 2008 and on or before 31 August 2013.

18. The patient information leaflet provided with LAIV states that children should be given two doses of this vaccine if they have not had flu vaccine before. However, JCVI considers that a second dose of the vaccine provides only modest additional protection. On this basis, JCVI has advised that most children should be offered **a single dose** of LAIV. However, children in clinical risk groups aged two to less than nine years who have not received flu vaccine before should be offered two doses of LAIV (given at least four weeks apart).

19. LAIV contains a highly processed form of gelatine (derived from pigs). Some faith groups do not accept the use of porcine gelatine in medical products. Current policy is that **only** those who are in clinical risk groups and have clinical contra-indications to LAIV are able to receive an inactivated injectable vaccine as an alternative. The implications of this for the programme will continue to be monitored.

Healthcare practitioners should refer to the Green Book influenza chapter for full details on contraindications and precautions for flu vaccines. This chapter can be found at: www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book.

Appendix D: Health and social care workers

Background

1. Flu immunisation should be offered by NHS organisations to all employees directly involved in delivering care. Immunisation against influenza should form part of healthcare organisations' policy for the prevention of transmission of infection (influenza) to protect patients, staff and visitors[7]. In addition, frontline health care workers (i.e. staff involved in direct patient care) have a duty of care to protect their patients from infection. This is not an NHS service, but an occupational health responsibility being provided to NHS staff by employers.

2. Social care providers, nursing and residential homes, and independent providers such as GPs, dental and optometry practices, and community pharmacists, should also offer vaccination to staff. Staff in the residential and care home sector, as well as staff providing care to people in their own homes, are working with some of the most vulnerable in our communities, so it is important that they help protect themselves and service users against flu.

3. Doctors are reminded of the General Medical Council's (GMC) guidance on Good Medical Practice (2013), which advises immunisation 'against common serious communicable diseases (unless otherwise contraindicated)' in order to protect both patients and colleagues[8].

4. Nurses, midwives and health visitors are reminded that the NMC Code requires registrants to "take all reasonable personal precautions necessary to avoid any potential health risks to colleagues, people receiving care and the public".[9]

5. The General Pharmaceutical Council advises pharmacy professionals providing key healthcare services, and often dealing with patients directly, to consider getting vaccinated and to encourage their staff to get vaccinated as well.

6. Health professionals such as physiotherapists, radiographers and paramedics registered with the Health and Care Professionals Council, are reminded of the requirement: "You must take all reasonable steps to reduce the risk of harm to service users, carers and colleagues as far as possible." [10]

---

[7] www.gov.uk/government/uploads/system/uploads/attachment_data/file/449049/Code_of_practice_280715_acc.pdf

[8] See paragraph 29 at: www.gmc-uk.org/guidance/good_medical_practice/your_health.asp

[9] www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf

[10] www.hcpc-uk.org/assets/documents/10004EDFStandardsofconduct,performanceandethics.pdf

7. Chapter 12 of the Green Book provides information on which groups of staff can be considered as involved in direct patient care[11].

8. We would encourage all employers to offer the vaccine in an accessible way, and all staff to consider seriously the benefits to themselves and their family, patients, residents, and service users and as a result accept the offer of the vaccine.

Commissioning for Quality and Innovation (CQUIN) Guidance

9. NHS England has published a two year CQUIN covering 2017/18 and 2018/19 which includes an indicator to improve the uptake of flu vaccinations for frontline healthcare staff within providers[12]. As in previous years, the national ambition is that a minimum of 75% of staff in trusts are vaccinated against flu. However, in recognition of the fact that for some trusts this represents a significant amount of work, the CQUIN indictor (1c) for the first year is for providers to achieve an uptake of flu vaccinations by frontline healthcare staff of 70%, rising to 75% in the second year. Providers commissioned under the NHS Standard Contract will be eligible for CQUIN payments, e.g. acute, mental health, community and ambulance trusts.

Communications

10. NHS Employers run a national staff-facing campaign to encourage healthcare workers to get vaccinated. The campaign provides support to NHS Trusts in England running their local staff flu vaccinations campaigns, ensures consistency of message, shares good practice and harnesses clinical and professional leadership at both national and local levels. Further information and contact details can be found on the NHS Employers flu fighter website[13]. There are a range of printable and adaptable resources for use in the NHS and care sector.

Vaccination by employers

11. Responsibility for provision of occupational flu immunisation rests with employers. Immunisation should be provided through occupational health services or other arrangements with private healthcare providers. It is vital that health and social care staff not only protect themselves against flu, but recognise the importance of infection prevention and control and protecting patients, clients and service users in their care.

[11] www.gov.uk/government/publications/immunisation-of-healthcare-and-laboratory-staff-the-green-book-chapter-12

[12] www.england.nhs.uk/nhs-standard-contract/cquin/cquin-17-19/

[13] www.nhsemployers.org/flu

12. It is recommended that NHS independent contractors (GPs, dentists, community pharmacists and optometrists) offer vaccination to their employed staff, and responsibility for this lies with employers as above. Staff should not be asked to go to their GP for their immunisation unless they fall within one of the recommended at-risk groups, or GPs have been contracted specifically to provide this service.

13. Teams involved in the vaccination of staff are reminded that occupational health services are recommended to keep records of staff who have been immunised. The information on vaccination should also be sent to GP practices, with the patient's permission, to update their patient records. It is important that accurate and up-to-date information on vaccine uptake in staff is available.

Appendix E: Pregnant women

Rationale and target groups

1. All pregnant women are recommended to receive the inactivated flu vaccine irrespective of their stage of pregnancy.

2. There is good evidence that pregnant women are at increased risk from complications if they contract flu.[14, 15] In addition, there is evidence that having flu during pregnancy may be associated with premature birth and smaller birth size and weight[16], [17] and that flu vaccination may reduce the likelihood of prematurity and smaller infant size at birth associated with an influenza infection during pregnancy.[18] Furthermore, a number of studies show that flu vaccination during pregnancy provides protection against flu in infants in the first few months of life.[19, 20,21,22,23]

3. A review of studies on the safety of flu vaccine in pregnancy concluded that inactivated flu vaccine can be safely and effectively administered during any trimester of pregnancy and that no study to date has demonstrated an increased

[14] Neuzil KM, Reed GW, Mitchel EF *et al.* (1998) Impact of influenza on acute cardiopulmonary hospitalizations in pregnant women. *Am J Epidemiol.* **148**:1094-102

[15] Pebody R *et al.* (2010) Pandemic influenza A (H1N1) 2009 and mortality in the United Kingdom: risk factors for death, April 2009 to March 2010. *Eurosurveillance* **15**(20): 19571.

[16] Pierce M, Kurinczuk JJ, Spark P *et al.* (2011) Perinatal outcomes after maternal 2009/H1N1 infection: national cohort study. *BMJ.* **342**:d3214.

[17] McNeil SA, Dodds LA, Fell DB *et al.* (2011) Effect of respiratory hospitalization during pregnancy on infant outcomes. *Am J Obstet Gynecol.* **204**: (6 Suppl 1) S54-7.

[18] Omer SB, Goodman D, Steinhoff MC *et al.* (2011) Maternal influenza immunization and reduced likelihood of prematurity and small for gestational age births: a retrospective cohort study. *PLoS Med.* **8**: (5) e1000441.

[19] Benowitz I, Esposito DB, Gracey KD *et al*. (2010) Influenza vaccine given to pregnant women reduces hospitalization due to influenza in their infants. *Clin Infect Dis.* **51**: 1355-61.

[20] Eick AA, Uyeki TM, Klimov A *et al*. (2010) Maternal influenza vaccination and effect on influenza virus infection in young infants. *Arch Pediatr Adolesc Med*. **165**: 104-11.

[21] Zaman K, Roy E, Arifeen SE *et al*. (2008) Effectiveness of maternal influenza immunisation in mothers and infants. *N Engl J Med.* **359**: 1555-64.

[22] Poehling KA, Szilagyi PG, Staat MA *et al.*(2011) Impact of maternal immunization on influenza hospitalizations in infants. *Am J Obstet Gynecol.* **204**:(6 Suppl 1) S141-8.

[23] Dabrera G, Zhao H, Andrews N *et al.* (2014) Effectiveness of seasonal influenza vaccination during pregnancy in preventing influenza infection in infants, England, 2013/14. *Eurosurveillance*. Nov 13;**19**. www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20959

risk of either maternal complications or adverse fetal outcomes associated with inactivated influenza vaccine.[24]

When to offer the vaccine to pregnant women

4. The ideal time for flu vaccination is before flu starts circulating. However, even after flu is in circulation vaccination should continue to be offered to those at risk and newly pregnant women. Clincians should apply clinical judgement to assess the needs of an individual patient, taking into account the level of flu-like illness in their community and the fact that the immune response following flu vaccination takes about two weeks to develop fully.

Data review and data recording

5. Uptake of vaccine by pregnant women, along with other groups, will be monitored. GPs will need to check their patient database throughout the duration of the flu vaccination programme in order to identify women who become pregnant during the season. GPs should also review their records of pregnant women before the start of the immunisation programme to ensure that women who are no longer pregnant are not called for vaccination (unless they are in other clinical risk groups) and so that they can measure the uptake of flu vaccine by pregnant women accurately.

Maternity services

6. Midwives need to be able to explain the benefits of flu vaccination to pregnant women and either refer them back to their GP practice or community pharmacy for the vaccine or offer the vaccine in the maternity service itself. A number of different models exist including running flu vaccination clinics alongside the maternity service. NHS England teams will explore ways of commissioning maternity services to provide flu vaccination or linking maternity services with GP practices or community pharmacies where relevant. If arrangements are put in place where maternity providers or pharmacies provide the flu vaccine, it is important that the patient's GP practice is informed in a timely manner (within 48 hours) so their records can be updated accordingly, and included in vaccine uptake data collections. Maternity providers should ensure they inform GPs when a woman is pregnant or no longer pregnant.

[24] Tamma PD, Ault KA, del Rio C *et al*. (2009) Safety of influenza vaccination during pregnancy. *Am. J. Obstet. Gynecol*. **201**(6): 547-52.

Appendix F: Vaccine supply and ordering

Vaccine composition for 2017/18

1. Flu viruses change continuously and the WHO monitors the epidemiology of flu viruses throughout the world. Twice a year it makes recommendations about the strains to be included in vaccines for the forthcoming winter. For the 2017/18 flu season (northern hemisphere winter) it is recommended that trivalent vaccines contain the following:

   - an A/Michigan/45/2015 (H1N1)pdm09-like virus;
   - an A/Hong Kong/4801/2014 (H3N2)-like virus; and
   - a B/Brisbane/60/2008-like virus.

   It is recommended that quadrivalent vaccines containing two influenza B viruses contain the above three viruses and a B/Phuket/3073/2013-like virus.

2. For further information see: www.who.int/influenza/vaccines/virus/recommendations/2017_18_north/en/

Vaccine suppliers

3. All flu vaccines for children are purchased centrally by PHE. This includes vaccine for the national offer to all children aged two to three years and children in reception class and school years 1 to 4, and for children in risk groups aged six months to less than 18 years.

4. For children in clinical risk groups under 18 years of age where LAIV is contraindicated, suitable inactivated influenza vaccines are procured centrally and should be offered. The quadrivalent inactivated influenza vaccine (Fluarix™ Tetra®) is authorised for children aged from three years and is preferred because of the additional protection offered. Children aged from six months to less than three years should be given inactivated influenza vaccine (Split Virion) BP®. Fluenz Tetra and inactivated injectable vaccines can be ordered through the ImmForm website: www.immform.dh.gov.uk

5. In 2016/17 ordering controls were introduced on centrally purchased flu vaccines. These were put in place to reduce the amount of excess vaccine, in particular LAIV, ordered by general practice but not administered to children. It is envisaged that controls will also be in place in 2017/18. The latest information on these controls will be available in Vaccine Update both prior to, and during, the flu vaccination period.

6. The table below summarises the principles for LAIV ordering bearing in mind that it has a short shelf life and the impact of local stockpiling for the rest of the NHS.

General Principles for LAIV ordering

- LAIV is supplied in a 10-dose pack: **1 pack = 10 doses**
- **Order small amounts weekly** and receive weekly deliveries
- Be **realistic** about the amount of vaccine that you expect to need
- Spread your orders over the course of the flu vaccination season – **later ordered stock will have a later expiry date and will last longer**
- Hold no more than 2 weeks stock in your fridge; **local stockpiling can cause delays or restrictions on stock being released to the NHS, and increases the risk of significant loss of stock if there is a cold chain failure in your practice**

7. For all other eligible populations apart from children providers remain responsible for ordering vaccines directly from manufacturers. It is recommended that orders are placed with more than one manufacturer in case of supplier delays or difficulties in the manufacture or delivery of the vaccine.

8. The vaccines that will be available for the 2017/18 flu immunisation programme are set out in the table below.

Supplier	Name of product	Vaccine Type	Age indications	Contact details
AstraZeneca UK Ltd	Fluenz Tetra ▼	Live attenuated, nasal (quadrivalent)	From 24 months to less than 18 years of age	0845 139 0000
GSK	Fluarix™ Tetra ▼	Split virion inactivated virus (quadrivalent)	From three years	0800 221 441
MASTA	Imuvac®	Surface antigen, inactivated virus	From six months	0113 238 7552

	Inactivated Influenza Vaccine (Split Virion) BP	Split virion, inactivated virus	From six months	
	Quadrivalent Influenza Vaccine (split virion, inactivated) ▼	Split virion, inactivated virus	From three years	
Mylan (BGP Products)	Influvac® sub-unit	Surface antigen, inactivated virus	From six months	0800 358 7468
	Imuvac®	Surface antigen, inactivated virus	From six months	
	Influenza vaccine, suspension for injection (influenza vaccine, surface antigen, inactivated)	Surface antigen, inactivated virus	From six months	
Pfizer Vaccines	Influenza vaccine (split virion, inactivated), pre-filled syringe	Split virion, inactivated virus	From five years	0800 089 4033
	Enzira®	Split virion Inactivated virus	From five years	
Sanofi Pasteur vaccines	Quadrivalent Influenza Vaccine (split virion, inactivated) ▼	Split virion, inactivated virus	From three years	0800 854 430
	Inactivated Influenza Vaccine (Split Virion) BP	Split virion, inactivated virus	From six months	
	Intanza®15 µg	Split virion, inactivated virus	60 years of age and over	

Seqirus Vaccines Ltd	Agrippal®	Surface antigen, inactivated virus	From six months	08457 451 500

9. None of the influenza vaccines for the 2017/18 season contain thiomersal as an added preservative.

10. Some flu vaccines are restricted for use in particular age groups. The Summary of Product Characteristics (SPC) for individual products **should always** be referred to when ordering vaccines for particular patients.

11. More detailed information on the characteristics of the available vaccines, including ovalbumin (egg) content will be published on the PHE Immunisation web pages.

12. Flu vaccines generally start to be distributed from late September each year. However, vaccine manufacture involves complex biological processes, and there is always the possibility that initial batches of vaccine may be subject to delay, or that fewer doses than planned may be available initially. Immunisers should therefore be flexible when scheduling early season vaccination sessions, and be prepared to reschedule if necessary.

Appendix G: Data collection

Introduction

1. As in previous years, flu vaccine uptake data collections will be managed using the ImmForm website (www.immform.dh.gov.uk). PHE coordinates the data collection and will issue details of the collection requirements by the end of July 2017 and guidance on the data collection process by early September 2017. This guidance will be available at: www.gov.uk/government/collections/vaccine-uptake which is where flu vaccine uptake data is also published.

2. Queries concerning data collection content or process should be emailed to influenza@phe.gov.uk. Queries concerning ImmForm login details and passwords should be emailed to helpdesk@immform.org.uk.

Reducing the burden from data collections

3. Considerable efforts have been made to reduce the burden of data collections on GPs by increasing the number of automated returns that are extracted directly from GP IT systems. Over 90% of GP practices benefited from using automated IT data returns for flu vaccine uptake for the final 2016/17 survey. GP practices that are not able to submit automated returns should discuss their arrangements with their GP IT supplier. If automated returns fail for the monthly data GPs will be required to submit data manually on to ImmForm to meet contractual obligations.

Data collections for 2017/18

4. Monthly data collections will take place over four months during the 2017/18 flu immunisation programme. Subject to the Burden Advice and Assessment (BAAS) approval, the first data collection will be for vaccines administered by the end of October 2017 (data collected in November 2017), with the subsequent collections monthly thereafter, and with the final data collection for all vaccines administered by the end of January 2018 (final data collected in February 2018). Uptake data for healthcare workers will collect information on immunisations given up to the end of February 2018 (final data collected in March 2018).

5. Data will be collected and published monthly at national level and by local NHS England team level. Additionally, data at local authority level will be collected once at the end of the campaign.

6. During the data collection period, those working in the NHS with relevant access rights are able, through the ImmForm website, to:

    - see their uptake by eligible groups
    - compare themselves with other anonymous general practices or areas
    - validate the data on point of entry and correct any errors before data submission
    - view data and export data into Excel, for further analysis
    - make use of automated data upload methods (depending on the IT systems used at practices)
    - access previous years' data to compare with the current performance.

7. These tools can be used to facilitate the local and regional management of the flu vaccination programme.

Monitoring on a weekly basis

8. Weekly uptake data will be collected from a group of GP practices that have fully automated extract and upload facilities provided by their IT suppliers. These data will be published in the PHE weekly flu report available throughout the flu season at: www.gov.uk/government/publications/weekly-national-flu-reports. During the data collection period, those working in the NHS with relevant access rights are able, through the ImmForm website to view this data as per the monthly collections.

Vaccine uptake data collection of healthcare workers

9. Approval for a mandatory collection will be sought from the BAAS. Further details about this will be published at: www.gov.uk/government/collections/vaccine-uptake.

10. PHE will be responsible for monthly collections of flu vaccine uptake data over five months during the 2017/18 flu season. Guidance will be provided to trusts and through NHS England to all those involved in the collection and reporting of these data. Data will be published on the PHE website.

11. NHS England teams can use their own methods of collecting information from GP practices so as to best meet the needs of their area. The recommended method of collecting healthcare worker data from GPs is through the ImmForm data entry tool. It is important to note that this data entry tool is not a route for GP practices to submit data directly to PHE and thus bypass NHS England

teams – it is the responsibility of the NHS England teams to submit the data collected via the data entry tool; this application is not monitored by PHE and no data are extracted from it by PHE. This data entry tool is one of many different options for NHS England teams to collect staff flu vaccination data from GP practices and other organisations that carry out work on behalf of the NHS.

Vaccine uptake data collection of school aged children

12. PHE will be responsible for monthly collections of flu vaccine uptake for children in reception class and in school years 1 - 4 over four months during the 2017/18 flu season. Collection will be undertaken through the ImmForm data entry tool. NHS England teams will agree responsibility for completion of this monthly data entry to ImmForm with their providers.

Appendix H: Contractual arrangements

General practice

1. The enhanced service specification for seasonal influenza and pneumococcal immunisation outlines the responsibilities of GP practices and details the service they will provide in respect of the flu vaccination programme. The enhanced service specification has been agreed between NHS Employers (on behalf of NHS England) and the General Practitioners Committee (GPC) of the British Medical Association (BMA).

2. The people eligible for flu vaccination under the enhanced service are those patients aged 65 and over on 31 March 2018, pregnant women, those aged six months to 64 years (excluding patients aged two and three as of 31 August 2017) defined as at-risk in the Green Book.

3. There is a separate enhanced service specification for the childhood seasonal influenza vaccination programme, covering the vaccination of children aged two and three years as of 31 August 2017.

4. Children in clinical risk groups in reception year and school years 1 to 4 may be offered LAIV alongside their peers as part of school based delivery. If a child in an at-risk group does not receive flu vaccination through this route, then they should be offered it in general practice. For instance, a child may miss out because of being absent from school on the day the vaccination was offered or because the child is contraindicated to LAIV and the local service provider does not offer inactivated flu vaccines. Some parents may choose to continue to have children in clinical risk groups immunised by their GP, rather than at school.

5. General practices are reminded that the enhanced service requires that a proactive call and recall system is developed to contact all at-risk patients through mechanisms such as by letter, e-mail, phone call, or text. Template letters for practices to use will be available at www.gov.uk/government/collections/annual-flu-programme nearer the time.

6. Every effort should be made to ensure all at-risk children who are not in one of the age groups eligible for flu vaccination at school are immunised in general practice.

7. NHS England will monitor the enhanced services that GP practices provide for flu vaccination to ensure that services comply with the specifications. NHS England teams will need assurance that providers have robust implementation plans in place to meet or exceed the vaccine uptake aspirations for 2017/18 and

that they have the ability to identify eligible 'at-risk' patients as well as two- and three-year-olds.

Community Pharmacy Seasonal Influenza Vaccination Advanced Service

8. Since 2015 all community pharmacies can apply to provide flu vaccination to eligible adult patients (that is those aged 18 years and over). The service can be provided by any community pharmacy on the NHS England Pharmaceutical List that has a consultation room, can procure the vaccine, meet the data recording requirements, and has appropriately trained staff.

9. Vaccination for children will not be offered through the Community Pharmacy Seasonal Influenza Vaccination Advanced Service.

10. Contractors will be required to offer the service in accordance with the service specification for 2017/18 which will be published on www.PSNC.org.uk. This service specification will include details such as:
    - Payment and reimbursement details;
    - Details of eligible patients;
    - Accreditation requirements;
    - Data recording requirements;
    - Claiming for payments; and
    - Post payment verification arrangements.

11. Data on flu vaccinations administered outside general practice must be passed back to the patients' GP surgery (i.e. by close of business on the working day following the immunisation) for timely entry on the electronic patient record and submission to ImmForm for the national data survey. This is important for clinical reasons (such as any adverse events) and also to ensure that these vaccinations are included in the weekly and monthly vaccine uptake figures.

School-based provision

12. NHS England will make local provision for delivery of flu vaccination to school aged children. Provision will normally be in primary school settings apart from one or two areas in the country where provision will be through general practice.

Supply and administration of vaccines

13. A range of mechanisms can be used for the supply and administration of vaccines, including patient group directions (PGDs), patient specific directions (PSDs) or prescribing individual prescriptions. Where PGDs are developed, they must comply with the legal requirements specified in the Human Medicines Regulations 2012, and should reflect NICE good practice guidance on PGDs: www.nice.org.uk/guidance/mpg2
14. PHE PGD templates, and a PGD to support the pharmacy advanced service, will be available to support the national flu immunisation programme 2017/18. Please note, these PGD templates must be suitably authorised before use. These will be available prior to commencement of the programme from: www.gov.uk/government/collections/immunisation-patient-group-direction-pgd

The enhanced service specifications for GP practices on seasonal flu and the childhood flu vaccination programmes can be found at: www.england.nhs.uk/commissioning/gp-contract/

Appendix I: Communications

1. An integrated communications strategy will be produced for the national flu immunisation programme 2017/18. The strategy will be led by PHE and will provide communications colleagues in partner organisations with information and resources to assist the delivery of the programme. Partners include DH, NHS England, NHS Employers, the Department for Education and the Local Government Association.

Publicity and information materials

2. Ahead of the flu season, NHS-branded patient information leaflets for different eligible groups will be reviewed including:

    - The flu vaccination: who should have it and why
    - Protecting your child against flu
    - All about flu and how to stop getting it: Easy read version for people with learning disabilities
    - All about flu and how to stop getting it: Easy read version for children with learning disabilities
    - Pregnancy: How to help protect you and your baby

3. The following template letters will also be available to GP practices:

    - to invite at-risk patients and those aged 65 and over for flu vaccination
    - to invite two-, and three-year-olds
    - an easy-read invitation letter template for people with learning difficulties

4. The following materials for the delivery of flu vaccination through schools will be available:

    - briefing for head teachers and other staff
    - a national consent form
    - template letters to invite eligible school age children for flu vaccination
    - the ‘Protecting your child against flu’ leaflet.

5. NHS Employers’ *Flu Fighters* campaign materials to support flu vaccination of healthcare workers are available to order from their website at: www.nhsemployers.org/campaigns/flu-fighter

6. Updated training and information materials for healthcare practitioners will also be available. These will include:
    - National flu programme training slide set
    - Childhood flu programme training slide set
    - Inactivated influenza vaccine: information for healthcare practitioners
    - Childhood flu immunisation programme: information for healthcare practitioners
    - Flu immunisation e-learning programme,

National marketing campaign

7. The 2016/17 marketing campaign ('Stay well this winter') is being evaluated and the lessons learned will inform any campaign plans for 2017/18. Further information will be issued in due course and resources can be downloaded from https://campaignresources.phe.gov.uk/resources/

All materials will be made available on the GOV.UK website at: www.gov.uk/government/collections/annual-flu-programme. Materials used in previous years can also be found here.

Free copies of the leaflets will be available to order through the DH health and social care order line: www.orderline.dh.gov.uk/ecom_dh/public/home.jsf