



Public Health
England



Royal College
of Nursing

National Minimum Standards and Core Curriculum for Immunisation Training for Registered Healthcare Practitioners

Revised February 2018



Public Health
Agency



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_uk
Facebook: www.facebook.com/PublicHealthEngland

For queries relating to this document, please contact:

immunisation.lead@phe.gov.uk (England)
publichealthwales.vaccines@wales.nhs.uk (Wales)
pha.immunisation@hscni.net (Northern Ireland)

© Crown copyright 2018

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit [OGL](http://www.nationalarchives.gov.uk/ogp/) or email psi@nationalarchives.gsi.gov.uk. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Published: February 2018

PHE publications gateway number: 2017736

Review date: February 2023



PHE supports the UN
Sustainable Development Goals



Acknowledgements

These National Minimum Standards and Core Curriculum for Immunisation Training are a revised and updated version of the original standards published by the former Health Protection Agency in 2005. Although previously published as two separate documents, this revised document incorporates both the Minimum Standards and the Core Curriculum in one document.

Substantial revisions have been made to this version by Public Health England (PHE) with invaluable support, comments and contributions from professional organisations, training providers and immunisation experts from across the UK. A wide consultation process has been carried out to ensure that the views of practitioners delivering immunisation in many different service areas have been represented. The following organisations were asked for their comments:

- Centre for Pharmacy Postgraduate Education
- Community Practitioners and Health Visitors Association
- Department of Health England
- Department of Health Northern Ireland
- Faculty of Public Health
- Health Education England
- Institute of Health Visiting
- NHS Education Scotland
- NHS England Health and Justice
- NHS England Nursing Directorate
- NHS England Public Health Commissioning Central Team
- Occupational Health Heads of Department, Managers, Senior Nurses
- Pharmaceutical Services Negotiating Committee
- Public Health Agency Northern Ireland
- PHE Health and Justice
- PHE Health Protection Team members
- PHE Nursing Directorate
- PHE Screening and Immunisation Team members
- Public Health Wales
- Royal College of General Practitioners
- Royal College of Midwives
- Royal College of Nursing
- Royal College of Paediatrics and Child Health
- Royal Pharmaceutical Society
- School And Public Health Nurses Association
- Surgeon General's Department, Defence Public Health
- UCL Great Ormond Street Institute of Child Health

The authors gratefully acknowledge the advice and recommendations they provided.

The joint RCN/PHE documents 'Supporting the delivery of immunisation education', and the 'Immunisation knowledge and skills competence assessment tool' previously published by the RCN have both now been incorporated into this version of the National Minimum Standards and Core Curriculum for Immunisation.

Intended audience

Healthcare practitioners from a wide diversity of professional backgrounds now give immunisations in many different settings and service areas e.g. general practice, schools, hospitals, prisons, occupational health, maternity, neonatal and paediatric services, pharmacies, sexual health clinics, long term care settings, etc. This document sets out a recommended minimum framework for developing training to meet the needs of all registered healthcare practitioners with a role in immunisation. A separate document details the recommended training for unregistered healthcare support workers with a role in immunisation ([National minimum standards and core curriculum for immunisation training of healthcare support workers](#)).

This document does not set out the processes for commissioning, procuring and delivering training.

These standards have been approved for use in England, Northern Ireland and Wales. In Scotland, these standards will be mapped across to educational resources as appropriate.

Contents

About Public Health England	2
Acknowledgements	3
Intended audience	4
Contents	5
Introduction	6
Intended users of the training standards and core curriculum	6
Why immunisation training standards and a core curriculum are needed	7
Aim and Objectives	9
Aim	9
Objectives	9
Standards for Immunisation Training for registered healthcare practitioners	10
Core areas of immunisation knowledge	12
Tailoring training to suit the requirements of the immunisers	13
Additional training needs	13
Provision of training	14
Updates	15
Topics to include in immunisation updates	16
Supervised practice	17
Assessment of knowledge and competence	17
Assessment of knowledge	17
Assessment of clinical competency	17
Evidence of competence	18
Training for non-clinical staff	18
Establishing training	19
Summary	19
Resources	20
Appendix A	22
Competency assessment tool: information for users	22
How to use the competency assessment tool:	22
Appendix B	27
Suggested content for core topics to be covered in foundation immunisation training	27
Appendix C	34
An example of the standards expected when assessing practitioners for competency in immunisation	34
Glossary	35

Introduction

Immunisation is one of our most successful public health interventions, protecting children and adults and saving thousands of lives every year. Ensuring ongoing public and professional confidence is critical to the success of these programmes. As the incidence of vaccine preventable diseases declines due to the success of immunisation programmes, healthcare practitioners need to be able to explain why vaccinations are still so important. In a climate where frequent changes are made to the vaccine programmes and electronic media facilitates the rapid spread of any vaccine concerns or controversies, public awareness and confidence in vaccines may waver. Evidence shows that healthcare practitioners are extremely important in communicating information about vaccination and are highly trusted by parents; a trust that has increased in recent years¹. Both this trust, and the advice given by healthcare practitioners, appear to be key factors influencing parental decisions about immunisation^{1,2}. A high level of knowledge and a positive attitude to immunisation in healthcare practitioners are widely acknowledged as being important determinants in achieving and maintaining high vaccine uptake^{3,4,5}. It is therefore vital that immunisers are confident, knowledgeable and up to date. Good foundation training and regular updates must be provided and undertaken to achieve this – a recommendation also made by NICE⁶ and the SAGE working group on vaccine hesitancy⁷.

Intended users of the training standards and core curriculum

These national training standards and core curriculum are intended to be of use to those commissioning and delivering immunisation services and training and to practitioners undertaking a role in immunisation.

This document sets the standards and lists the essential topics which should be incorporated into immunisation training for registered healthcare practitioners with a role in immunisation. Immunisation training providers can use this as a 'checklist' to ensure that any training being offered or that has been undertaken is comprehensive and meets national minimum standards for content. Demonstrating that the course covers all

¹ Campbell H, Edwards A et al. Changing attitudes to childhood immunisation in English parents. *Vaccine*. 2017 May 19;35(22):2979-2985. doi: 10.1016/j.vaccine.2017.03.089. Epub 2017 Apr 23.

² Edwards A, Bedford H et al. Promoting influenza vaccine for children. *Practice Nursing* 2017;28(10):1-5

³ Zhang J, While A, Norman I. Knowledge and attitudes regarding influenza vaccination among nurses: a research review. *Vaccine* 2010;28(44):7207-14

⁴ Dubé E, Laberge C et al. Vaccine hesitancy: an overview. *Hum Vaccin Immunother*. 2013 Aug;9(8):1763-73

⁵ Simone B, Carrillo-Santistevan P, Lopalco PL. Healthcare workers' role in keeping MMR vaccination uptake high in Europe: a review of evidence. *Euro Surveill*. 2012;17(26):pii=20206.

⁶ National Institute for Health and Care Excellence (NICE) Immunisations: reducing differences in uptake in under 19s. Public health guideline [PH21] Published: September 2009 Updated: September 2017

⁷ Strategic Advisory Group of Experts (SAGE) Report of the SAGE working group on vaccine hesitancy. October 2014

the core topics will not assure the quality of training however, so processes should be in place to monitor quality.

For those responsible for developing and delivering immunisation training, this document has been designed to ensure all core areas of immunisation knowledge and competency are covered by providing a curriculum around which to structure the training and to define the minimum level of training that should be provided. It is hoped this will also promote consistency in the immunisation training offered. The curriculum is designed to be comprehensive to prepare practitioners with a role in vaccine administration. The curriculum will also be relevant to those who do not actually administer vaccines but have been designated a role in providing information and advice or supporting the delivery of the programme. Trainers should adapt the curriculum (the topics covered and the level of detail required) to the specific needs of the workforce depending on the nature of their role and the vaccine(s) they deliver.

For those with a role in immunisation, these standards should help practitioners in requesting and gaining access to comprehensive training and should be seen as a useful tool rather than a barrier to practice. The re-publication of these minimum training standards does not mean that practitioners currently involved in immunisation who have not received specific training should be prevented from practising, but it is recommended that they are given the opportunity to receive comprehensive immunisation training as soon as is practically possible. They could also use the competency tool (Appendix A) to self-assess their immunisation practice so they can specifically address any areas necessary.

Why immunisation training standards and a core curriculum are needed

The UK immunisation programme is a carefully considered, evidence-based, and for most vaccines, an NHS-funded programme. Its development is informed by experts and extensive consideration and planning is undertaken to enable the vaccine programmes to be most effectively and successfully implemented. With the ongoing development of new and improved vaccines and the epidemiology of infectious diseases constantly changing, the need to modify or introduce new vaccine programmes occurs frequently. This introduction of new immunisation programmes has also meant that practitioners who have not received prior immunisation training because they have not previously been involved in delivering or advising on immunisations e.g. midwives, pharmacists, etc now require it.

Given that the best designed programme will fail if those tasked with delivering it are unable to do so effectively, it is vital that healthcare professionals involved in immunisation receive solid foundation training in immunisation. They need to understand what the vaccine policies and programmes are, how they are designed and

why changes are made. It is also important that they are offered regular updates in order to be informed of any amendments or of new policies and programmes.

Healthcare practitioner knowledge, confidence and attitudes to vaccination are also crucial in achieving high vaccine uptake. A parental attitudinal tracking survey conducted in England in 2016⁸ found that 71% of parents had a discussion with a healthcare professional before their child was due to be immunised. For those who were undecided about immunisation, 60% said that they felt more confident about immunising their child following their discussion. A study of attitudes to immunisation in pregnancy among women in the UK found that healthcare practitioners are pivotal in informing women, promoting the vaccine and discussing concerns⁹. Practitioners will only be able to do this if they have received comprehensive training.

Immunisation training is critical in preventing errors in vaccine practice¹⁰. Mistakes not only put patients at risk of adverse reactions and of being inadequately protected, they also erode public confidence in immunisation which will ultimately result in fewer people choosing to be vaccinated. Failure to deliver training and develop and maintain the knowledge and skills of healthcare practitioners delivering the immunisation programme may result in the expenditure of a large amount of human and financial resources in dealing with the consequences of errors made e.g. wasted vaccines, incident meetings, look-backs and revaccination clinics. It could also lead to cases and outbreaks of vaccine preventable disease and a loss in herd immunity.

In England, the Section 7A **core service specification for the national immunisation programme**¹¹ clearly states that the provider has a duty to ensure that contracted staff are fully competent and trained in accordance with these national standards. It also states that commissioners must ensure that the provider adheres to the requirement that *'professionals involved in administering the vaccine have the necessary skills, competencies and annually updated training with regard to vaccine administration'* and that providers (employers) should make regular training and development routinely available for their staff. Training is therefore an essential requirement included as a core element in immunisation contracts and service specifications. In addition, the **Health and Social Care Act 2008** states *'Persons employed by the service provider in the provision of a regulated activity must...receive such appropriate support, training, professional development, supervision and appraisal as is necessary to enable them to carry out the duties they are employed to perform'*¹².

⁸ Public Health England. Parental attitudes to childhood immunisation. Annual attitudinal survey 2016 infographic. 24 January 2017. Available at <https://www.gov.uk/government/publications/annual-attitudinal-survey-2016-infographic>

⁹ Campbell H, Van Hoek AJ et al. Attitudes to immunisation in pregnancy among women in the UK targeted by such programmes. *British Journal of Midwifery* 2015 23:8, 566-573.

¹⁰ Craig L, Elliman D et al. Pragmatic management of programmatic vaccination errors—Lessons learnt from incidents in London. *Vaccine* 2010;29(1):65-69

¹¹ NHS Public Health functions agreement 2017-18. Core service specification. National immunisation programme. April 2017.

¹² The Health and Social Care Act 2008 (Regulated Activities) Regulations 2014. Regulation 18 Staffing. Available at: <http://www.legislation.gov.uk/ukdsi/2014/978011117613/regulation/18>

Finally, the Medicines and Healthcare products Regulatory Agency (MHRA) are clear that only competent, qualified and trained professionals can use Patient Group Directions (PGDs) for the supply and/or administration of vaccines¹³. NICE guidance on PGDs¹⁴ recommends that a comprehensive and appropriate training programme be provided for all people involved in using PGDs and that training and re-training of health professionals using PGDs should incorporate a post-training assessment of competency.

Whilst these training standards are not mandatory, they are best practice guidelines. Providers of immunisation services should ensure that those advising on or administering immunisations are suitably knowledgeable and competent to do so in accordance with these standards.

Aim and Objectives

Aim

The overall aim of these national standards for immunisation training is to describe the minimum training that should be given to all practitioners engaging in any aspect of immunisation so that they are able to confidently, competently, safely and effectively promote and administer vaccinations.

Objectives

The aim will be achieved by setting out recommendations for commissioners, providers and trainers so that all those involved in immunisation have access to high quality training that enables them to:

- ensure that their practice is safe and effective
- provide accurate and up to date information about the relevant diseases and vaccines to their patients/parents/carers
- support individuals to make informed decisions about vaccination
- promote public confidence in vaccination
- improve the uptake of immunisation
- know where to request expert specialist advice if required
- deliver a high standard of care
- demonstrate competence in vaccine storage and administration

¹³ MHRA Patient group directions: who can use them. Guidance on GOV.UK website at <https://www.gov.uk/government/publications/patient-group-directions-pgds/patient-group-directions-who-can-use-them>

¹⁴ NICE Patient Group Directions. Medicines practice guideline [MPG2]. August 2013. Updated March 2017. Available at: <https://www.nice.org.uk/guidance/mpg2/chapter/Recommendations#training-and-competency>

- access and follow the recommendations detailed in the online version of Immunisation against Infectious Disease (the 'Green Book') and joint DH/PHE/NHS England Letters, Welsh Health Circular letters from Welsh Government or Department of Health for Northern Ireland HSS (MD) letters

Standards for Immunisation Training for registered healthcare practitioners

Table One

	Standard
The practitioners	Any registered healthcare practitioner who advises on and/or administers immunisations must have received specific relevant foundation training and have been assessed as competent by a registered practitioner who is experienced, up to date and competent in immunisation. They should only administer or advise on immunisations if they feel competent to do so.
The requirement to be trained and supervised	Those new to immunisation should receive comprehensive foundation immunisation training, either through a face to face taught course or a blended approach of both e-learning and a face to face taught course. New immunisers should also have a period of supervised practice and support with a registered healthcare practitioner who is experienced, up to date and competent in immunisation.
The requirement to be assessed	Both knowledge and clinical competence should be assessed before new immunisers start to give and/or advise about vaccines.
The training content	The content of the foundation training should include all the core areas of knowledge listed in Table Two. The content of update courses should include the recommended areas listed in Table Three.
Duration of foundation training	The duration of foundation immunisation training will depend on the previous experience, knowledge and skills of the immuniser, their role in immunisation

	<p>and the vaccine(s) they are to advise on and/or administer.</p> <p>The recommended minimum duration of foundation immunisation training for practitioners who advise on or administer the routine national schedule (e.g. Practice Nurses, Health Visitors) is two days (or 10 hours e-learning) in order to achieve all the learning outcomes listed in Appendix B.</p> <p>Training for practitioners who either only administer specific vaccines in their role e.g. midwives, school nurses, or who have an immunisation aspect to their role but do not administer vaccines, may be tailored specifically to their needs and can therefore be shorter in duration.</p>
<p>Frequency and duration of updates</p>	<p>Annual updates should be provided. More frequent updates may be required if substantial changes to programmes or policies are made or new vaccines are introduced. To include all necessary information, update training is likely to need a minimum of half a day for those delivering the routine national immunisation schedule.</p>
<p>Access to national policies and updates</p>	<p>All practitioners with a role in immunisation should have access to:</p> <ul style="list-style-type: none"> i) national guidance including the online version of <i>Immunisation against Infectious Disease</i>⁷ (the ‘Green Book’) ii) the monthly national immunisation newsletter <i>Vaccine Update</i> which describes the latest developments in vaccines, vaccination policies and procedures. In Wales, see <i>Welsh e-bulletin</i> (intranet only). In Northern Ireland see Vaccine Update NI iii) all relevant DH/PHE/NHS England letters and information for health professionals and patients (see <i>PHE immunisation webpages</i>). In Wales, see <i>Welsh Government letters</i> and Northern Ireland HSS (MD) letters
<p>Access to advice and support</p>	<p>All practitioners involved in immunisation should know who to contact for expert immunisation advice and support. When new to immunisation, they must have an identified supervisor who is an appropriately trained, experienced and knowledgeable practitioner in immunisation.</p>

	The supervisor should ensure the new immuniser's training and practice meets national standards and reflects current national policy.
Compliance	Those responsible for provision of the immunisation service (the employer) should ensure that all staff administering or advising on immunisations have received training that meets these national standards. Commissioners should ensure that providers are able to confirm that their immunisers have been trained and assessed.

Core areas of immunisation knowledge

Table Two:

	Core areas of immunisation knowledge
1	The aims of immunisation, national vaccine policy and schedules
2	The immune response to vaccines and how vaccines work
3	Vaccine preventable diseases
4	The different types of vaccines, their composition and the indications and contraindications
5	Current issues in immunisation
6	Communicating with patients, parents and carers about vaccines
7	Legal issues in immunisation
8	Storage and handling of vaccines
9	Correct administration of vaccines
10	Anaphylaxis and adverse reactions
11	Documentation, record keeping and reporting
12	Strategies for optimising immunisation uptake

All practitioners involved in immunisation should be able to demonstrate current, evidence-based and best practice-based knowledge and understanding of the areas listed in Table Two. Trainers should ensure that the content and mode of delivery of each session enables the participant to meet the learning objectives specified for each core topic. See Appendix B for suggested learning objectives and session content.

The core topics listed above are relevant to all immunisers in any setting where vaccines are given and should therefore be covered in all immunisation training. Trainers should adapt the training so that the topics are covered in a way and to a level of detail that is relevant to the role of the immunisers. For example, midwives immunising in a hospital setting may not need as much detail on ordering and storing vaccines as a Practice Nurse but they still need to know that vaccines should be kept within the recommended cold chain temperature range. Everyone involved in giving or advising on immunisation needs knowledge of the routine immunisation schedule even if they are only giving one specific vaccine as they need to know how that vaccine fits in with others that their patient has been given or needs to receive.

In addition, although listed separately above, the core topics can be combined together in training sessions to suit the needs of the trainees. For example, topics 8, 9 and 11 logically go together, as do topics 1 and 4, and 5 and 6.

Tailoring training to suit the requirements of the immunisers

The purpose of this document is to describe what immunisation training should be provided in order that those who give or advise on immunisation are competent and have a comprehensive, up-to-date knowledge base. It is not intended that these standards impose an onerous requirement on immunisers or demand on service providers. It is recommended that foundation training and updates are tailored to suit the requirements of the immunisers to their specific area of practice and the vaccine(s) that they deliver. So the answer to the question "*what training does a healthcare practitioner who only gives Hepatitis B vaccine /influenza vaccine require?*" is that their training should cover all the topics in the core curriculum but that these should be made context and vaccine specific. With only one vaccine to cover, length of training will be shorter than for those who give a range of different vaccines. However, it is important that their knowledge and practice is set within the broader context of the national programme as a whole. Knowledge and competence should be assessed as described subsequently in this document, and annual updates – either face to face, elearning or self-directed learning should be undertaken to ensure knowledge and practice remain current.

Additional training needs

In addition to the core topics listed above, those delivering training should consider whether healthcare practitioners require or would benefit from the inclusion of any other topics, depending on the particular setting or role. For example, practitioners responsible for overseeing the local implementation of the immunisation programme may benefit from training in audit and critical incident management.

Additional topics for consideration include:

- how to plan and develop training and methods of assessment in the local setting that meet the national minimum standards for immunisation training
- media training and effectively communicating with the public
- critical appraisal of research and literature and modern electronic library methods
- supervision and mentoring
- teaching methods
- data collection, the Child Health Information System and ImmForm
- how to audit and critically evaluate the vaccination service provided
- dealing effectively with persistent non-attenders
- ethical issues in vaccination
- vaccine adverse events
- critical Incident management including reporting mechanisms and audit
- dealing with complex vaccination queries
- implementing and evaluating ad hoc campaigns

Trainers and those responsible for co-ordinating, managing and leading immunisation services at local level should attend study days tailored to meet their needs and which go beyond the level and topics included on a foundation course. Examples include the annual National Immunisation Network conference run by PHE's National Immunisation Team, the annual Fundamentals of Immunisation course run by PHE and the UCL Institute for Child Health, the annual National Immunisation Conference in Manchester, the annual Welsh National Conference and other local or national study days held by different organisations and professional bodies across the country.

Practitioners may also require additional training depending on the vaccine(s) they give. For example, those who give travel immunisations will require specific training on travel health – a generic immunisation course alone would not be sufficient.

Provision of training

Ideally, training should be provided at a local level and led by local trainers so that it captures any local variation in programme implementation, clinical governance and record-keeping. In addition, involving local experts in delivering training enables immunisers to meet with local leaders in immunisation, identify contacts for support and advice and have an opportunity to raise any local concerns. However, where it is not possible to access training locally, it may be obtained from an experienced training provider elsewhere, provided the training comprehensively covers the standards and curriculum detailed in this document.

Providers of further and higher education may also offer suitable courses. Collaboration between educational establishments and local healthcare organisations should be encouraged as a way to facilitate sharing experience, skills and training materials and the development of new and/or strengthening of existing courses. Close collaboration

with PHE, NHS England Teams and Health Education England (HEE) in England; Public Health Wales, Health Boards and NHS Wales Trusts in Wales; and Public Health Agency and Health and Social Care Trusts in Northern Ireland is also recommended.

E-learning courses may also provide an effective mechanism through which immunisers can access training provided they are given specific, protected training time in which to undertake these. Where appropriate or necessary (particularly for those new to immunisation), a blended learning approach can be utilised with an e-learning course(s) used alongside (prior to or following) face-to-face sessions to help ensure participants achieve all of the required learning outcomes and consolidate their knowledge. Immunisation e-learning modules will be available to all practitioners with a role in immunisation on the [Health Education England e-Learning for Healthcare website](#). In Wales, e-learning modules are also available from Public Health Wales at www.wales.nhs.uk/immslearning. In Northern Ireland, e-learning and information on training can be found on the Public Health Agency Website at <http://pha.site/immunisationvaccine-preventable-diseases>. In addition, it is beneficial for practitioners to undertake some self-directed study in order to meet their ongoing immunisation learning needs and stay up to date. Providers should give practitioners time to do this.

Pre-course reading material may also be useful since there is a lot of information to cover, much of which may be new to those undertaking immunisation training. This will also serve as a useful reference tool after the course.

Trainers are encouraged to utilise a variety of different teaching methods to make immunisation training relevant, memorable and interesting and facilitate the application of knowledge to practice. As well as formal lectures, role play, scenarios, practical demonstrations and exercises, video clips, quizzes, etc should be used. Trainers may wish to make use of the training materials on the [PHE website Immunisation page](#) which contains slide sets, information for healthcare practitioner documents, links to videos and e-learning and an immunology animation. In Wales, [Public Health Wales](#) provides a variety of training resources which can be viewed on the NHS Wales intranet site. In Northern Ireland, the [Public Health Agency](#) provides general and programme specific immunisation resources for healthcare professionals. Trainers may also find some of the training resources listed in the Resources section of this document useful and some areas may have locally developed webpages and training resources.

Updates

The national immunisation programme is subject to continual evaluation and review by the JCVI in response to new and emerging evidence, resulting in regular changes to vaccine policy. In recent years the national programme has undergone significant expansion and the schedule has become more complex. In order to ensure the ongoing

delivery of a high quality, safe and effective national immunisation programme, practitioners who have completed their foundation immunisation training require access to regular and ongoing, high quality update training. Updates should also provide an opportunity for immunisers to identify any gaps in their knowledge and competence and address any queries or challenging issues that have arisen in the course of their practice.

It is therefore recommended that annual updates should be provided for all immunisers. These updates should include the areas listed in Table Three and cover any recommended changes to practice and the most up to date policies and guidelines.

Topics to include in immunisation updates

Table Three

	Immunisation Update Training
1	Current issues in immunisation
2	Recent epidemiology of vaccine preventable disease
3	Any changes to vaccine recommendations or national policy
4	Update on vaccine ordering, storage and administration
5	Any changes to legislation relevant to vaccination
6	Review of current practice, recent vaccine incidents and identification of areas for improvement
7	Q&A session for problems encountered in practice

Specific training in Basic Life Support and anaphylaxis recognition and management should also be undertaken annually or as per employer’s stipulations.

Where major changes are made to existing programmes or new vaccines are introduced, additional training sessions should be organised and these should be attended by the relevant immunisers e.g. sessions for a new vaccine for school age children should be attended by school nurses. General Practice and team meetings also provide an ideal opportunity for immunisation update sessions.

Face to face updates are likely to be of particular value to those who give or advise on a diverse range of immunisations e.g. Practice Nurses. They provide an excellent opportunity to interact with other immunisers, work through scenarios and discuss any clinical issues that are arising in practice.

However, it is recognised that for some immunisers in some areas of practice, face-to-face updates may not be feasible, updating may be best undertaken through self-

directed learning, and providers should give practitioners time to do this. Methods for this may include undertaking the assessment modules of an immunisation e-learning programme and doing/re-doing the necessary modules to refresh knowledge. Practitioners could also read through the “Information for healthcare practitioner” documents on the [PHE website](#), listen to any available webcasts and read recently published articles on immunisation relevant to their area of practice. Country specific guidance is also available for [Wales](#) and [Northern Ireland](#). They should also take the opportunity to work through the competency assessment tool again (Appendix A), either on their own or with a supervisor or colleague to ensure they still feel they can confidently meet all areas.

Supervised practice

In addition to acquiring knowledge through a theoretical taught course, practitioners need to develop clinical skills in immunisation and apply their knowledge in practice. A period of supervised practice to allow acquisition and observation of clinical skills and application of knowledge to practice when the practitioner is new to immunisation is therefore strongly recommended (see Appendix A).

Assessment of knowledge and competence

Those responsible for training should develop effective strategies for assessing both knowledge and clinical competence. An example of the standards expected when assessing practitioners for competency in immunisation is provided in Appendix C.

Assessment of knowledge

Practitioners’ knowledge following training should be assessed by those delivering training and recorded. This may be done in a number or combination of different ways, for example:

- a short answer or multiple-choice answer test
- scenario-based questions
- oral question and answer test
- a reflective log or diary of events
- a personal portfolio of learning events

Assessment of clinical competency

Before starting to give immunisations, it is recommended that all new immunisers should spend time with an experienced registered practitioner who has undertaken training that meets the national minimum standards and is experienced in advising about immunisation and giving vaccines. The new immuniser should have the

opportunity in these sessions to observe and discuss relevant issues with the experienced practitioner.

Those new to their role in immunisation should also demonstrate an appropriate standard of practice to their supervisor. This supervised practice should be structured and robust and follow a clear, comprehensive checklist so each step of the consultation is considered. A competency checklist such as that written by PHE and the RCN (see Appendix A) should be used for formal assessment and sign-off of the practitioner's clinical competency in immunisation. A copy of the completed checklist should be retained in the practitioner's personnel file.

Whilst there is no agreement or finite evidence as to how many times this supervised practice should occur, both the supervisor and new practitioner need to feel confident that the practitioner has the necessary skills and knowledge to advise on and/or administer vaccines. If the practitioner gives a range of different vaccines to patients of different ages, their supervisor should ensure this is taken into account and they should be given the opportunity to observe and also be assessed on this range.

The supervisor does not require a formal teaching and assessing qualification but should be competent in immunisation and have the ability to make an assessment of a new immuniser's knowledge and skills. One of the supervisor's key roles is to go through the assessment document with the new immuniser and assure themselves that the new immuniser has the appropriate level of knowledge and skill to undertake their role in immunisation.

Evidence of competence

Immunisers should keep a portfolio of completed competency checklists, knowledge test score sheets, reflective logs, completion of e-learning course certificates and certificates of attendance at immunisation training courses and updates. This will provide practitioners with a means to be able to show evidence of completion of training and achievement of competence to both current and future employers. It will also provide useful evidence of continuing professional development for professional revalidation.

Training for non-clinical staff

Although the principal purpose of this document is to set out the training recommendations for registered healthcare practitioners involved in immunisation, it is important to give consideration to the fact that there are now many different staff involved in the immunisation process, including some from non-clinical backgrounds. Non-clinical staff such as general practice and clinic receptionists, staff who work in social services, schools, nurseries, baby clinics and children's centres can be critical in

both supporting the immunisation programme and in influencing patients and parents access to, and decision-making about vaccines.

It is important that those providing advice or access to immunisation, in whatever service area, have access to training so that they can provide basic information and facts, are able to advise where to get up-to-date information and give consistent messages about immunisation. They also need to understand the benefits of vaccination so they can provide appropriate and timely appointments and be an advocate for immunisation. The content, level, depth and breadth of the training required will vary depending on the staff involved and the area in which they work. These staff do not require a course which covers all of the core curriculum topics - a general awareness/information session would be beneficial.

Establishing training

Successful implementation of the standards will require:

- awareness from commissioners and providers as to why immunisation training is important and why funding it and releasing staff to be able to access it should be a priority
- provision of adequate resources to support training
- identified leadership and co-ordination of training in service areas where immunisations are discussed and given
- trainers who have the expertise to deliver training to the required standard
- regular evaluation of training being offered and audit of whether immunisers are accessing and completing training and assessment
- identification of any barriers to immunisation training and putting plans in place to address them.

Summary

A high level of knowledge and a positive attitude to immunisation among practitioners involved in the delivery of the immunisation programme are important determinants in achieving and maintaining high vaccine uptake. It is therefore strongly recommended that good foundation training, annual updates, supervision and support should be provided to all practitioners with a role in immunisation. This should ensure their level of knowledge and skill is appropriate, their care delivery competent and their attitude to immunisation positive so they may safely and effectively deliver immunisation programmes.

Resources

eLearning for Healthcare (e-LfH) Interactive flu immunisation elearning programme written by PHE. Available at <http://www.e-lfh.org.uk/programmes/flu-immunisation/>
A general immunisation elearning programme covering the 12 Core Topics will be available in Spring 2018.

Public Health Wales provides a variety of e-learning modules, including flu modules which are available at www.wales.nhs.uk/immslearning

Public Health Agency Northern Ireland provide training and other materials for health professionals on their website: <http://pha.site/immunisationvaccine-preventable-diseases>

Fundamentals of Immunisation. This annually-held two day intense theoretical course is run by Public Health England and UCL Great Ormond Street Institute of Child Health in March. It is designed for those new to a role in immunisation and is most suited to those who give or advise on a range of different vaccines. The course comprises a series of lectures from national immunisation experts covering all twelve core topics in the Core Curriculum described in this document. Application details are made available in [Vaccine Update](#) a couple of months prior to the conference.

National Immunisation Conference. This one-day conference is run by the Stockport NHS Foundation Trust and is held on the first Friday of December in Manchester each year. It consists of a number of keynote sessions and mini-symposia on topical issues in immunisation.

National Immunisation Network Conference. This two-day conference is run annually by Public Health England usually around the end of April. The first day discusses new and current scientific issues in immunisation and the second day focuses on implementation issues. Application details are made available in [Vaccine Update](#) a couple of months prior to the conference.

Welsh Immunisation Conference. This is a one-day national conference organised annually by Public Health Wales. The venue alternates each year between North and South Wales and is usually held around [European Immunisation Week](#) in April/May each year. A wide range of national experts and local immunisation teams present on key immunisation topics.

Public Health England. Teaching slide sets, Green Book and Vaccine Update access, DH/PHE/NHS England letters and patient and healthcare practitioner information about the different vaccine programmes. Available at:
<https://www.gov.uk/government/collections/immunisation>

Vaccine Knowledge Project. A source of independent information about vaccines and infectious diseases written and managed by the Oxford Vaccine Group. It provides clear information on complex topics backed up with references to high-quality research. The content is suitable both for general public and healthcare professionals Available at: <http://vk.ovg.ox.ac.uk/>

Appendix A

Competency assessment tool: information for users

The competency assessment tool has been divided into three areas:

1. Knowledge.
2. Core clinical skills – many of the competencies are core skills used in a range of clinical areas, but for the purposes of this assessment tool, they should be used in the context of immunisation.
3. The clinical process/procedure for vaccine administration.

It is recognised that not all competencies will be relevant to all staff. For example, in some areas such as schools, pharmacy or prison health, immunisers will require very specific knowledge and skills. The competencies required will depend on the individual service area and the specific range of vaccines given by the immuniser. The word 'patient' has been used throughout but can be interchanged with the appropriate word for the health setting in which the competency assessment framework is used.

Where there are very specific needs for particular service areas, service leads may wish to extract the relevant competencies for their service for ease of assessment. This is acceptable but for consistency and ease of transfer between areas, the wording should be the same and any documentation should clearly state which area(s) and for which vaccine(s) the assessment has been carried out. This list of competencies is not exhaustive and additional competencies, as required by locality or service area, can be added as necessary.

How to use the competency assessment tool:

The assessment tool can be used as a self-assessment tool, an assessment tool for use with a supervisor or both, as described below. Where a particular competence is not applicable to the individual's role, indicate 'not applicable' (NA).

1. Vaccinators: those administering immunisations should be assessed against all competencies, except where the vaccinator is only required to use specific administration techniques, for example if they are only giving the intranasal influenza vaccine or intradermal Bacillus Calmette-Guérin (BCG) vaccine.

2. Other role in immunisation: if a practitioner's role is to advise about or support immunisation programmes, but not to actually administer vaccines, they and their assessor need to identify which competencies are applicable

3. Practitioner to complete self-assessment column: practitioners are stating that they feel competent in their role and have the necessary knowledge and skills.

4. Share with supervisor:

The supervisor assessing the practitioner must be a registered healthcare practitioner who is competent and experienced in delivering immunisation programmes.

The supervisor carrying out the assessment should:

- review the practitioner's self-assessment, discussing any areas that are identified as 'need to improve' and the relevant action plans
- observe their performance as they provide immunisations/advice to several patients and indicate whether each competency is 'met' or 'needs to improve' in the supervisor review column
- if improvement is needed, help the immuniser to develop an action plan that will enable them achieve the required level of competence with a review date for further assessment
- when the supervisor and practitioner agree that the practitioner is competent in all the relevant areas, sign off the section at the bottom of the assessment.

The competency assessment tool is provided on the following pages.

National Minimum Standards and Core Curriculum for Immunisation Training

	Competency Assessment Tool: Registered Staff - For staff registered on a professional register such as NMC , GMC, HCPC, GPhC	Not applicable (NA) to current area of practice	Self-assessment Record: met (M) or needs to improve (NI) (initial & date)	Supervisor review Record: met (M) or needs to improve (NI) (initial & date)	Record action plan for any assessed as 'needs to improve' (as agreed with supervisor)
	Part 1: Knowledge		Self-Assessment	Supervisor review	
1a	Can provide evidence of attendance at a specific, comprehensive immunisation training course. (The course should cover all of the topics detailed in the "Core Curriculum for Immunisation Training") and/or provide evidence of completing an immunisation eLearning programme (state the name of course/type of training attended).				
1b	Has successfully completed a knowledge assessment e.g. an e-learning course assessment, end of course test, etc				
1c	Able to access the online Green Book and is aware of the electronic update nature of this publication.				
1d	Able to access other relevant immunisation guidance e.g. DH/PHE/NHS England letters, Vaccine Update, Q&As on new or revised vaccine programmes, the PHE algorithm for persons with unknown or uncertain immunisation status, or Wales and NI equivalents.				
1e	Knows who to contact for advice if unsure about vaccination schedules, vaccine spacing and compatibility, eligibility for vaccines or if a vaccine error occurs (e.g. local Screening and Immunisation team, PHE Health Protection Team, other locally available immunisation lead or Wales and NI equivalents).				
1f	Able to access current information on other countries' schedules if required (e.g. World Health Organisation (WHO) or the European Centre for Disease Control (ECDC) websites) and can advise patients and/or parents/carers if any additional vaccines are needed.				
1g	Able to discuss the relevant national and local immunisation programmes and the diseases for which vaccines are currently available. Aware of programmes for specific clinical risk groups and use of vaccination in outbreak situations. Knows where to refer to if vaccines are not available locally (e.g. BCG or travel vaccines).				
1h	Is able to advise on appropriate safe, timely administration of the vaccine(s) required by the patient.				
1i	Understands the different types of vaccine, is able to state which vaccines are live and which are inactivated and is aware of the different routes of administration e.g. injected, intranasal or oral.				
1j	Able to explain the general principles of immunisation e.g. why multiple and/or booster doses are required, why intervals need to be observed between doses and why influenza vaccine needs to be given annually.				
1k	Aware of local and national targets for immunisation uptake and why vaccine uptake data is important. If appropriate, knows where to find uptake data for their area of practice				

National Minimum Standards and Core Curriculum for Immunisation Training

	Part 2: Core Skills for immunisation	Not applicable (NA) to current area of practice	Self-Assessment	Supervisor review	
2a	Is up to date with local requirements for anaphylaxis and CPR training (normally recommended annually).				
2b	Aware of the whereabouts of anaphylaxis and emergency care equipment, how and when to use it and the follow up care required.				
2c	Can techniques explain incident response and reporting process in case of a procedural error, needlestick injury, etc. as per local protocol.				
2d	Demonstrates good practice in hand hygiene and relevant infection prevention.				
2e	Disposes of sharps, vaccine vials and other vaccine equipment safely in line with local guidance.				
2f	Demonstrates knowledge and understanding of the rationale for maintaining the vaccine cold chain. Familiar with local protocols for cold chain management and the action to be taken in case of cold chain failure and who to contact.				
	Part 3: Clinical process and procedure	Not applicable (NA) to current area of practice	Self-Assessment	Supervisor review	
3a	Checks patient's identity and patient's records prior to vaccination to ascertain previous immunisation history and which vaccines are required e.g. to bring patient up to date with national schedule, for planned travel, for specific identified risk, post-exposure prophylaxis etc.				
3b	Can explain which vaccines are to be given and able to answer patient's and/or parents/carers questions, referring to leaflets to aid explanations/discussion as appropriate and using interpreter if necessary to ensure patient/parent/carer informed. Knows who to refer to or who to contact if further detail or advice is required.				
3c	Able to clearly and confidently discuss the risks and benefits of vaccination and able to address any concerns patients and/or parents/carers may have.				
3d	Aware of, and able to discuss, any current issues, controversies or misconceptions surrounding immunisation.				
3e	Demonstrates knowledge of consent requirements and the particular issues relevant to the area of practice, such as the capacity to consent, Mental Capacity Act and the age of the individual. Ensures consent is obtained prior to vaccination and is appropriately documented.				
3f	Demonstrates knowledge and understanding of contraindications and is able to assess appropriately for contraindication or, if necessary, the need to postpone vaccination.				
3g	Checks that the vaccine has been appropriately prescribed via a Patient Specific Direction (PSD) or, is authorised to be supplied and/or administered via a Patient Group Direction (PGD).				
3h	Checks the presentation of vaccine products, the expiry date, how they have been stored prior to use and prepares them according to the Summary of Product Characteristics (SPC).				
3i	Positions patient appropriately and chooses appropriate vaccination site(s) i.e. use of anterior lateral aspect of the thigh in babies under one year and/or upper arm in older children and adults for injectable vaccines.				

National Minimum Standards and Core Curriculum for Immunisation Training

3j	Chooses the correct administration route for the vaccine(s) to be delivered.				
3k	Demonstrates correct subcutaneous technique where recommended e.g. for patients with bleeding disorders				
3l	Demonstrates correct intradermal technique e.g. for administration of BCG vaccine.				
3m	Demonstrates correct intramuscular technique e.g. for administration of DTaP vaccine.				
3n	Demonstrates correct intranasal technique e.g. for administration of live influenza vaccine to children.				
3o	Demonstrates correct oral technique e.g. for administration of live rotavirus vaccine to babies				
3p	Demonstrates an understanding of practice/clinic procedures for the reporting of vaccine reactions and knows how and when to report using the MHRA's Yellow Card Scheme.				
3q	Completes all necessary documentation, recording type and product name of vaccine, batch number, expiry date, dose administered, site(s) used, date given and name and signature.				
3r	Demonstrates good record keeping and understands the importance of making sure vaccine information is recorded on GP data system, reported to local Child Health Information System (CHIS), in the Personal Child Health Record (PCHR), and the use of appropriate methods for reporting unscheduled vaccinations or where vaccines are given outside of GP premises.				
3s	Advises patient/parent/carer on potential post-vaccination reactions as appropriate (e.g., rash, pyrexia) and management of these. Provides patient/parent/carer with a copy of post-immunisation advice sheet such as the NHS leaflet 'What to expect after vaccination' or the product's Patient Information Leaflet (PIL), if appropriate.				

Statement of competence	
Name of individual: ----- has shown appropriate knowledge, skill and competence to safely administer/advise about vaccinations.	Signature Date:
Name of supervisor carrying out assessment :-----	Signature Date:

Appendix B

Suggested content for core topics to be covered in foundation immunisation training

Core knowledge area	Learning outcome	Learning objectives	Session content should include
1) The aims of immunisation, national vaccine policy and schedules	Able to explain the aims of immunisation and describe national vaccine policy and schedules	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Explain how vaccine policy is made and what information informs these policy decisions • Describe the current UK vaccine schedule • Demonstrate knowledge of relevant national policy and its broad aims • Describe how immunisation programmes are monitored through the use of surveillance • Explain how vaccine uptake is monitored and why this is important • Describe any local variations to immunisation policy if appropriate • Design appropriate schedules for individuals with unknown or uncertain immunisation status and for patients in clinical risk groups who may require additional vaccinations • Demonstrate the ability to access the online Green Book and relevant vaccine policy and guidance documents 	<ul style="list-style-type: none"> • Relevant history of immunisation • Concepts of control, elimination and eradication of vaccine preventable diseases • The role of surveillance in designing and monitoring immunisation programmes • Role of the JCVI and how vaccine policy is decided upon • The role of different agencies and personnel in immunisation • How vaccination programmes are commissioned • How the number, timing and spacing of doses is decided upon • The construction of the National Immunisation schedule • Current published policy e.g. Green Book, DH/PHE/NHS England publications and letters or Wales and Northern Ireland equivalents. • Designing schedules for people with uncertain or incomplete vaccination status with the minimum number of visits • Resources available locally and nationally to obtain expert specialist immunisation advice
2) The immune response to vaccines and how vaccines work	Able to explain the immune response to vaccines and describe how vaccines provide	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Explain the difference between innate, passive and active immunity 	<ul style="list-style-type: none"> • Active and passive immunity, cell-mediated and antibody-mediated immunity, antibodies and antigens

National Minimum Standards and Core Curriculum for Immunisation Training

Core knowledge area	Learning outcome	Learning objectives	Session content should include
	individual and community protection	<ul style="list-style-type: none"> • Explain the basic immune response to a vaccine • List conditions which affect the immune response to vaccines • Describe herd immunity and explain why it is important 	<ul style="list-style-type: none"> • The immune system response to a vaccine • Concept of herd immunity and the effect of vaccination on the community as a whole • How herd immunity protects individuals • Conditions that affect immunity and the immune response to vaccines
3) Vaccine preventable diseases	Able to describe and recognise the main features of vaccine preventable diseases and the nature and frequency of their acute and long term complications	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Describe the main signs and symptoms, mode of transmission and period of infectivity of the relevant vaccine preventable disease(s) in the UK • Describe the historical impact of vaccination on the epidemiology of the disease • Explain the current incidence of each disease in the UK • Be able to list the most common acute and potential long term complications of the vaccine preventable disease(s) and describe their frequency • Know where to find further information about each disease 	<ul style="list-style-type: none"> • Epidemiology, signs and symptoms and mode of transmission of each disease • Potential complications/long-term sequelae and the nature and rates of these for each disease
4) The different types of vaccines, their composition and the indications and contraindications	Has knowledge of the different types of vaccines used	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Identify the types of vaccine used to prevent the diseases relevant to their practice (immunoglobulin, live, inactivated, polysaccharide, conjugate) • Explain the differences between a live and an inactivated vaccine • Describe which groups of patients cannot receive live vaccines and why • State when immunoglobulin is indicated • Describe how vaccine trials are carried out before a vaccine is released and how safety 	<ul style="list-style-type: none"> • Immunoglobulins, live and inactivated vaccines, polysaccharide and conjugate vaccines and combination vaccines • Composition of a vaccine, use of adjuvants and purpose of other additives • Stages of vaccine trials before and after licensure • Efficacy, reactogenicity, compatibility • Contraindications, precautions and adverse events for each vaccine • Immunosuppressant and immunomodulatory medicines that may contraindicate live vaccines

National Minimum Standards and Core Curriculum for Immunisation Training

Core knowledge area	Learning outcome	Learning objectives	Session content should include
		<p>and efficacy are monitored after their release</p> <ul style="list-style-type: none"> • State the contraindications and precautions for each type of vaccine • Describe the nature and frequency of the most common adverse events following vaccination and compare these with the complications of the diseases • Describe the contents of a vaccine 	<ul style="list-style-type: none"> • Which vaccines are recommended in pregnancy and which are contraindicated • How and when to report suspected vaccine associated adverse events • •
<p>5) Current issues in immunisation</p>	<p>Knows about relevant and current issues/controversies in immunisation</p>	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Describe any issues/controversies currently relevant to the vaccines they give/advise on • Identify suitable information sources that patients/parents/carers may wish to view for more information • Be aware of any changes to the vaccines or policy relating to that vaccine • Critically evaluate vaccine research, allegations and media reporting of vaccine issues 	<ul style="list-style-type: none"> • Importance of keeping updated • How and where to find information (local and national sources of advice) and • Assessing the reliability of vaccine information sources • Media portrayal and social media discussion of vaccine news stories
<p>6) Communication with patients, parents, carers and other relevant people e.g. employers, employees, school staff, prison staff etc about vaccines</p>	<p>Can effectively communicate with patients, parents and carers and other relevant people about immunisation</p>	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • List the factors influencing patients/parents/carers decision-making • Communicate key facts about vaccines to patients/parents/carers and be able to respond to any questions/concerns • Effectively communicate about any risks associated with vaccination • Demonstrate commitment to offering the patients/parents/carers the best advice on vaccination • Tailor the information they give to the individual patient/parent/carer's needs • Provide patients/parents/carers with appropriate vaccine information leaflets at a 	<ul style="list-style-type: none"> • Issues that affect and influence patient/parents/carers in their vaccine decision making • The effect of media reporting on parental views and acceptance of vaccination • Responding to commonly asked questions and misconceptions • Risk communication • Provision of suitable vaccine information materials • Local and national sources of further information and advice for parents

National Minimum Standards and Core Curriculum for Immunisation Training

Core knowledge area	Learning outcome	Learning objectives	Session content should include
		<p>timely interval prior to vaccination and will be familiar with the content of the leaflets themselves</p> <ul style="list-style-type: none"> • Direct patients, parents and carers to reliable sources of information both locally and nationally and via the internet and social media • Discuss with school staff/employers/prison staff etc what immunisations are indicated and why 	
7) Legal issues in immunisation	Understands the legal aspects of immunisation	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Explain the principles of valid consent and how it should be requested and recorded • Describe the legal basis for requiring data protection • Describe the reasons for good documentation and communication of information on vaccination • Explain the differences between Patient Group Directions (PGDs) and Patient Specific Directions (PSDs) and state when each should be used • Describe the clinical governance issues which relate to immunisation 	<ul style="list-style-type: none"> • Current legal requirements for consent, including 'Gillick' competence' and looked after children. • Data protection (Data Protection Act, Caldicott) • Documentation • Professional accountability • Patient Specific Directions and Patient Group Directions • Licensing of vaccines and off-label use
8) Storage and handling of vaccines	Follows correct procedures for storage and handling of vaccines	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Describe what the cold chain is and why it is important to maintain it • Specify minimum/maximum temperatures for vaccine storage • Describe the effects of temperature on potency and efficacy of vaccine • Describe the requirements for the correct delivery and storage of vaccines including daily monitoring and written records, correct use of designated purpose-built vaccine 	<ul style="list-style-type: none"> • Effects of temperature on potency, efficacy and adverse events of vaccines • Daily monitoring and recording of vaccine fridge temperature records • Correct use of designated purpose-built vaccine fridge • Importance of stock rotation and regular checks for expired vaccine • Ordering appropriate vaccine stock • Management of breakdowns in the cold chain

Core knowledge area	Learning outcome	Learning objectives	Session content should include
		fridge, regular checks for expired vaccine and ordering appropriate vaccine stock <ul style="list-style-type: none"> • Explain what action to take if vaccines are not delivered or stored within the recommended temperature range and the cold chain is not maintained • Manage breakdowns in the cold chain and know who to inform and what action to take 	<ul style="list-style-type: none"> • Disposal of heat and cold damaged vaccine • Setting up and using cool boxes for transporting vaccines to out of surgery sessions • Management of cold chain during a clinic session • Responsibility for ensuring that all vaccines administered have been stored correctly • Local and national vaccine storage and handling recommendations and requirements
9) Correct administration of vaccines	Able to reconstitute and administer vaccines correctly	The practitioner will be able to: <ul style="list-style-type: none"> • Demonstrate appropriate selection and preparation of vaccine equipment • Explain how to prepare and dispose of vaccinations and vaccination equipment • Demonstrate safe practice in checking the vaccine to be administered • Demonstrate correct reconstitution of vaccines where required • Demonstrate ability to check patient's suitability for vaccination prior to administration by obtaining appropriate medical and medication history • Correctly position patients for safe and effective vaccine administration • Demonstrate how to ask parents to hold their children (where necessary) for safe and effective vaccine administration • Explain the choice of immunisation site and needle size (where applicable) • Demonstrate correct administration technique for the vaccine to be given (oral, intranasal, subcutaneous, intramuscular, intradermal injection) 	<ul style="list-style-type: none"> • Dosage and reconstitution of relevant vaccine(s) • Preparation and disposal of vaccination equipment • Assessment of fitness for vaccination • Current recommendations for route, needle size and injection site for administration of vaccine based on effects on efficacy and local reactions • Relevant infection prevention and control measures relating to vaccination • Sharps legislation and avoidance and management of needle stick injury • Correct disposal of used vaccines

National Minimum Standards and Core Curriculum for Immunisation Training

Core knowledge area	Learning outcome	Learning objectives	Session content should include
		<ul style="list-style-type: none"> • Demonstrate good knowledge and practice of infection prevention and control • Show appropriate care following administration of the vaccine • Demonstrate appropriate sharps management and explain the procedure to be taken in the event of a needle stick injury 	
10) Anaphylaxis and adverse reactions	Able to manage anaphylaxis and other adverse events appropriately	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Give evidence of anaphylaxis and basic life support training within the last 12 months • Define and recognise an adverse event • Report the incidence of local and systemic adverse events and anaphylaxis • Distinguish between anaphylaxis and fainting • Prepare and check the equipment and drugs required for managing anaphylaxis • Manage anaphylaxis • Know when, how and where to report an adverse event 	<ul style="list-style-type: none"> • Definition and types of adverse events • Signs and symptoms of and differences between anaphylaxis and fainting • Potential causes of anaphylaxis and ways of decreasing the risks • Physiology of anaphylaxis and allergic reactions • Treatment of anaphylaxis, equipment required, adrenaline dosages and sites for its administration • Where and how to record and report adverse events to vaccinations • Use of MHRA Yellow Card reporting system
11) Documentation, record keeping and reporting	Correctly documents and reports all vaccines given	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Correctly document vaccines given (type of vaccine, batch number, expiry date, date given and injection site) in all relevant records (personal medical record, Personal Child Health Record (red book), Child Health Information system, GP system, OH system, etc.) • Explain the importance and purposes of recording information about vaccinations in the different vaccine recording systems • Describe the role and importance of vaccination coverage data 	<ul style="list-style-type: none"> • Requirements and importance of accurate documentation • Importance of and reasons for recording batch numbers, injection site, etc • Where and why vaccinations should be recorded and reported • Policy for reporting and recording vaccine errors and incidents

National Minimum Standards and Core Curriculum for Immunisation Training

Core knowledge area	Learning outcome	Learning objectives	Session content should include
		<ul style="list-style-type: none"> • Describe the role of the Child Health Information System in record-keeping, calling and re-calling for immunisation • Report serious untoward events 	
<p>12) Strategies for optimising immunisation uptake</p>	<p>Able to identify and implement strategies for improving vaccine uptake</p>	<p>The practitioner will be able to:</p> <ul style="list-style-type: none"> • Explain the importance of good organisation of clinics, appointment systems etc, to enable good uptake of vaccination • Describe strategies to facilitate high vaccination uptake through opportunistic vaccination, vaccination at home, vaccination for hospital in- or out-patients, clinics organised out of working hours etc • Describe how to organise immunisation clinics to maximise uptake and take into consideration any factors which may affect uptake • Confidently encourage other primary care health professionals to promote vaccination 	<ul style="list-style-type: none"> • Identification of barriers and obstacles that may prevent uptake of vaccination and impede efficient vaccine delivery • Development of strategies to overcome barriers and improve immunisation services • Consideration of factors that affect uptake such as the clinic environment, accessibility, appointment timings and attitudes of staff to vaccination • The critical importance of healthcare professional confidence in vaccination

Appendix C

An example of the standards expected when assessing practitioners for competency in immunisation

- healthcare practitioners who immunise should receive specific training in immunisation, the content and duration of which will depend on which vaccines they are to administer and/or the role they will have in immunisation.
- each practitioner is required to complete an assessment of knowledge at the end of the course (e.g. a multiple-choice paper). The questions will be based on the course content and a pass mark of at least 80% is required.
- practitioners new to immunisation should have a named supervisor in the workplace. The named supervisor should be someone who is registered and clinically competent in immunisation with an appropriate knowledge and skill level.
- practitioners new to immunisation are required to complete a number of observed clinical encounters, which includes administration of a vaccine (if part of role), until both the supervisor and the practitioner feel confident that the practitioner has the necessary skills and knowledge to advise on and/or administer each of the vaccines they are to advise on/deliver. The observed administrations will be carried out under the supervision of the named supervisor. These will be documented.
- a practitioner will be assessed as competent once they have achieved the required pass mark in the knowledge assessment and a successful competency assessment.
- annual update training and appraisals are required to ensure personal development, meet professional requirements for safe practice (e.g. NMC Code) and support the delivery of safe, up to date, high quality care

Glossary

DH	Department of Health
ImmForm	ImmForm is the system used by the Department of Health, the National Health Service and Public Health England to record vaccine uptake data for some of the immunisation programmes and to order vaccines for the NHS
HEE	Health Education England
JCVI	Joint Committee of Vaccination and Immunisation
GMC	General Medical Council
GPhC	General Pharmaceutical Council
MHRA	Medicines and Healthcare products Regulatory Agency
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
NMC	Nursing and Midwifery Council
PHA NI	Public Health Agency Northern Ireland
PGD	Patient Group Direction
PHE	Public Health England
PHW	Public Health Wales
RCN	Royal College of Nursing
SAGE	Strategic Advisory Group of Experts. SAGE is the principal advisory group for vaccines and immunization to the World Health Organization (WHO)