

Acknowledgements

This National Minimum Standards and Core Curriculum for Vaccination Training guidance for all healthcare staff with a role in delivering vaccination programmes, is a revised, updated and combined version of the 'National Minimum Standards and Core Curriculum for Vaccination Training for Registered Healthcare Practitioners' (2018) and the 'National Minimum Standards and Core Curriculum for Vaccination Training of Healthcare Support Workers' (2015), which were both published by Public Health England (PHE). Key elements of the 'Flu vaccination training recommendations' (PHE August 2020, updated UK Health Security Agency (UKHSA) August 2024), and the 'Training recommendations for COVID-19 vaccinators' (PHE November 2020, updated UKHSA October 2024), written to address the specific challenges of training during the COVID-19 pandemic, have also been incorporated.

A consultation process has been carried out to ensure that the views of practitioners delivering vaccination in many different service areas have been represented.

The following organisations were asked for their comments:

- Centre for Pharmacy Postgraduate Education
- College of Paramedics
- Community Practitioners' and Health Visitors' Association
- Department of Health and Social Care, England
- Faculty of Public Health
- Institute of Health Visiting
- NHS England Nursing Directorate (including Midwifery)
- NHS England Vaccinations Directorate
- NHS Health at Work Network
- Public Health Agency Northern Ireland

- Public Health Scotland
- 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
- Society of Occupational Medicine
- Surgeon General's Department, Defence Public Health
- UCL Great Ormond Street Institute of Child Health

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Background

Healthcare staff from a wide range of occupations now give vaccinations in many different settings and service areas and, in response to pandemics and outbreaks, also in a range of less traditional venues adapted to facilitate rapid delivery, often at huge scale. To meet the challenges of this increasingly complex and varied provision, the opportunity has been taken to update and merge existing training guidance, and to set out a recommended minimum framework for developing training to address the shared – and specific – needs of all healthcare staff with a role in vaccination.

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

Terminology

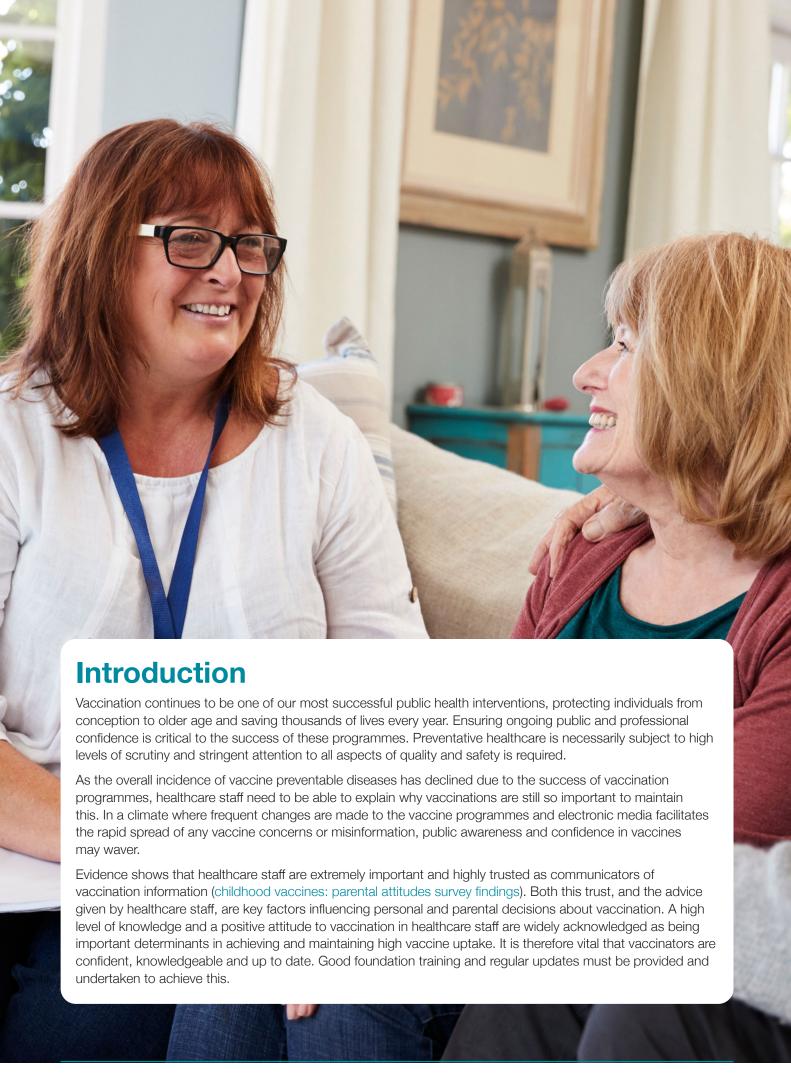
There are two groups of people who provide healthcare: registrants and non-registrants. In this guidance, the former will be referred to as Registered Healthcare Professionals (RHCP) and the latter as Healthcare Support Workers (HCSW) regardless of their varying titles and the setting in which they work.

The term RHCP refers to any healthcare worker who is on a professional register, for example, that of the Nursing and Midwifery Council (NMC), the General Medical Council (GMC), the General Pharmaceutical Council (GPhC) or the Health and Care Professions Council (HCPC). However, although registered, there may still be limitations on what registrants can do and all registrants should work within their scope of practice as set out by their regulator.

The term HCSW is used for an employee who, whilst not on a professional register, has been delegated a role in vaccination by an appropriate registered healthcare professional.

Within this guidance, the term 'professional' is used when referring to registered staff only, the term 'practitioner' is used when the guidance applies to both RHCPs and HCSWs and the term 'vaccinator' may include both those who administer vaccines and those who advise on or have another role in vaccination programme delivery, depending on context.





Intended users of the training standards and core curriculum

This guidance is intended to be of use to those commissioning and delivering vaccination services and training, and to staff undertaking any role in vaccination. It sets the standards for and lists the essential topics which should be incorporated into vaccination training.

Those responsible for commissioning vaccination services or procuring vaccination training

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

Those responsible for developing and delivering vaccination training

This guidance has been designed to ensure all core areas of vaccination 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 vaccination training offered. The curriculum is designed to be comprehensive to prepare both those staff with a role in vaccine administration, and those who do not 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.

Staff with a role in vaccination

All staff should have received appropriate training prior to undertaking a role in vaccination, whether administering, providing information and advice or any other role that supports the delivery of a vaccine programme. These standards should help staff to request and gain access to this training.

Individuals who have received training for a specific vaccine or vaccines and are now further expanding their vaccination role will require further training. It should not be assumed that an individual who has undertaken training and been assessed as competent to deliver one or more specific vaccine programmes has all the knowledge and skills necessary to provide other vaccinations without additional training, supervised practice, and assessment of competence, or that it is appropriate for them to do so.

When new vaccine programmes or significant changes to existing programmes are introduced, staff should be provided with additional training on these and should also use the competency tool (Appendix A) so they can identify and address any specific learning needs.

Why vaccination training standards and a core curriculum are needed

The best designed programme will fail if those tasked with delivering it are unable to do so safely and effectively

The UK vaccination programmes are carefully considered and evidence-based. Their 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. The introduction of new vaccination programmes across the lifespan has also meant that staff groups who have not previously been involved in delivering or advising on vaccination now require training.

It is vital that the healthcare staff involved receive solid foundation training in vaccination. They need to understand what the vaccine policies and programmes are, how they are designed and why changes are made. They also need to understand the operational aspects of delivering the vaccine programme such as legal issues and how to safely store and administer the vaccines. Following foundation training, it is important that they are offered regular updates in order to be informed of any new policies and programmes and of any changes to existing ones.

Healthcare practitioner knowledge, confidence and attitudes to vaccination are crucial in achieving high vaccine uptake

The UK Health Security Agency (UKHSA) carries out regular surveys of parents of young children in England to explore their knowledge, beliefs and attitudes to vaccines and experience of vaccine services. These surveys consistently find that parents have a high level of trust in vaccination information received from healthcare professionals. Speaking to a healthcare professional has also been found to increase confidence for parents who were undecided about vaccinating their child. The 2023 survey found that although most parents had already decided to have all of the scheduled infant vaccines before they spoke to a healthcare professional, two thirds of parents said they felt more confident about their decision after receiving information from a healthcare professional, with 14% of parents changing their mind in favour of vaccination. Prior to their child receiving their first vaccines, the majority of parents surveyed had discussed these with a healthcare professional. They most commonly reported speaking to their health visitor or midwife. This demonstrates how important it is that all healthcare practitioners in all areas are confident and knowledgeable about vaccination, whether advising about or administering vaccines.

A prior study of attitudes to vaccination in pregnancy among women in the UK found that healthcare practitioners are pivotal in informing women, promoting the vaccine and discussing concerns.

Undertaking vaccination training will enable practitioners to carry out these important discussions with confidence.

Vaccination training is critical in preventing errors in vaccine practice

Errors not only put individuals at risk of adverse reactions and of being inadequately protected, they also erode public confidence in vaccination which will ultimately result in fewer people choosing to be vaccinated. Failure to provide and receive training and develop and maintain the knowledge and skills of healthcare staff delivering the vaccination programme may result in the expenditure of a large amount of human and financial resources in dealing with the consequences of errors, for example through wasted vaccines, incident meetings, look-backs and, in some circumstances, revaccination clinics. It could also lead to cases and outbreaks of vaccine preventable disease and a loss of herd immunity. Maintaining safe delivery of the vaccine programmes is critical to their success.

Contractual and legal responsibilities

Training is an essential requirement which should be included as a core element in vaccination contracts. The NHS England General practice vaccination and vaccination services: standards and core contractual requirements states that 'all healthcare professionals involved in the administration of vaccines must have the necessary skills and training'.

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'.

These training standards provide best practice guidelines which have been developed by the UKHSA in consultation with relevant healthcare and professional organisations. Whilst they are not mandatory, it is strongly recommended that providers of vaccination services ensure that those advising about or administering vaccinations are suitably knowledgeable and competent to do so in accordance with these standards.

Patient Group Directions (PGDs) stipulate that their users are trained

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

UKHSA template PGDs developed for the NHS in England state that the practitioner using the PGD "must have undertaken training appropriate to [the] PGD as required by local policy and in line with [these] National Minimum Standards and Core Curriculum for Vaccination Training" and "must be competent to undertake vaccination and to discuss issues related to vaccination".

Healthcare Support Workers

In recent years, for some vaccination programmes, particularly those where vaccine delivery at scale within limited timescales has been required, the vaccinator workforce has expanded to include HCSWs. There are many roles HCSWs could take on to increase capacity within the delivery of a vaccination service. An example of this is when very large numbers of flu vaccines need to be given in a relatively short time period each year. As other vaccines, such as the adult pneumococcal, shingles and COVID-19 vaccines are often opportunistically given at the same time as the flu vaccine, in some General Practices and other settings, the HCSW's duties may now include a role in administration of these vaccines. Some areas also include HCSWs within the school vaccination team to deliver the childhood influenza vaccine programme. HCSWs may also have become involved in the delivery of other vaccine programmes.

However, if they are going to be involved in vaccine administration, they must be trained and competent and the following areas should be carefully considered:

- there need to be appropriate mechanisms in place for prescribing, delegation, accountability and supervision in order that vaccine administration is safe and effective
- all vaccinators must be confident, competent and well supported to ensure public confidence in vaccination is maintained: quality, safety and reputation are vitally important
- delegation of vaccination must be both appropriate and in the best interests of the provider organisation and, most
 importantly, of the patient. Each profession has its own standards or code of conduct which provide information on
 delegation responsibilities and RHCPs who delegate roles in vaccination should follow these
- delegation of the vaccinator role to non-registered staff does not necessarily result in operational efficiencies. For example, it is outside the scope of practice of a HCSW to undertake a clinical assessment for vaccination, take informed consent or work to Patient Group Directions (PGDs). For this reason, they may be better employed in roles other than vaccine administration which will then maximise the capacity of RHCPs to undertake the more complex tasks

An advanced level of knowledge may also be required to deal with clinical complexities such as underlying medical conditions and medications for these, potential contraindications, scheduling considerations and treatment of adverse reactions. It is also required to be able to respond to patients and parents who may have a lot of complex questions and concerns and may be hesitant about receiving a vaccine. The depth and breadth of knowledge and experience required means that it is not considered suitable for HCSWs to deliver injected vaccinations to infants and pre-school age children. It may also not be considered suitable for individuals with complex medical or vaccination histories (unless assessed by a RHCP as appropriate to do so) or individuals who require travel vaccination. A comprehensive travel health risk assessment by a RHCP is required prior to travel and Yellow Fever vaccine must be given by a RHCP.

It is recommended that only experienced HCSWs take on a role in administering vaccines. It is expected that these HCSWs will have achieved education and training to Level Three of the Qualifications and Credit Framework (QCF) or equivalent and that they would be working at Level Three or above of the NHS Career Framework.

This guidance has been developed to define the standards that are considered a minimum for vaccination training for HCSWs who are going to administer vaccines and to provide guidance to those responsible for developing and delivering this training. It is expected that the same topics should be covered in the training and assessment of HCSWs who are going to administer vaccines as would be covered for RHCPs, but the level of detail should be adapted to what they need to know to safely perform their delegated role. For example, although it is outside of the scope of practice of a HCSW to undertake a clinical assessment for vaccination, take consent or work to a PGD, their training still needs to include an understanding of these clinical and legal issues and that these need to be undertaken prior to vaccination.

As stated above, not all HCSWs will be delegated a role in vaccine administration. There are many other roles they can take on to increase capacity and maximise efficiency in the delivery of vaccine programmes, such as vaccine ordering or monitoring the cold chain. The training of these HCSWs should be adapted to meet their specific needs and role.

Non-clinical staff and the wider healthcare workforce

Although the principal purpose of this guidance is to set out the training recommendations for those with a role in delivering the vaccination programme, either by advising about vaccination or administering vaccines, it is important to give consideration to the fact that there are now many different staff involved in the vaccination process, including some from non-clinical backgrounds. This includes non-clinical staff such as general practice and clinic receptionists and staff who work in social services, schools, nurseries, baby clinics and children's centres who can be critical in both supporting the vaccination programme, and in giving patients and parents access to, and influencing decision-making about vaccines.

In addition, many healthcare practitioners working in other clinical areas may be in a position to discuss and encourage vaccination when seeing patients for other reasons for example, physiotherapists seeing patients with respiratory conditions.

It would be beneficial if those in a position where they may be asked for advice about vaccination, in any service area, have access to training so that they can provide basic information and facts, are able to signpost to up-to-date information and give consistent messages about vaccination. They also need to understand the benefits of vaccination so they can provide appropriate and timely appointments (or advice about this) and be an advocate for vaccination.

Specific training should be provided for reception staff who may also be involved in the practical aspects of vaccination programmes such as receiving vaccine deliveries or recording vaccine fridge temperatures.

Trainers should adapt the curriculum to the needs of the workforce. The content, level, depth and breadth of the training required will vary depending on the staff involved and the area in which they work. For those staff who do not require a course which covers all the core curriculum topics – a general awareness/information session would be beneficial.

Providers of pre and post graduate healthcare education are recommended to consider including vaccination within the curriculum.

Training considerations for response to an incident or outbreak

It is crucial in an incident or outbreak situation when a large number of vaccines may need to be delivered rapidly, that vaccinations are effectively delivered to as many of those eligible as possible. This will require knowledgeable, confident and competent vaccinators. It is therefore very important that comprehensive training and competency assessment is not compromised. Vaccines must be given safely and effectively whilst maximising delivery at pace to ensure those receiving vaccines are rapidly protected and public confidence in the vaccination programme is maintained. It is vital that vaccinators are given the time and opportunity to undertake the comprehensive training they need and are supervised and supported in practice as required.

Careful thought should be given as to the most appropriate delegation and role of staff in delivering the vaccination service in the context of an incident or outbreak. For example, when deciding upon roles within the vaccination team, the points in the HCSW section above should be considered, especially when the service may need to be operationalised very rapidly.

It must not be assumed that having received training for and been signed-off as competent to deliver just one vaccine, such as COVID-19 or flu, healthcare staff are capable of administering any vaccine to any individual. Anyone advising about, assessing suitability for, or administering any vaccine must have received specific training for that vaccine and be competent and confident to do this.

When planning training, the likely training needs of each group of staff (depending upon, for example, whether or not they have professional registration, their previous vaccination experience and when they last vaccinated) should be reviewed. There should be a strong emphasis on using the competency assessment to review individual prior knowledge and skills to provide all of the elements of the service that they are being asked to carry out. Training should then be provided to address any identified knowledge and skills gaps. Following this, competence and confidence should be re-assessed.

Any additional training requirements for vaccinating specific groups of individuals, such as for those undertaking paediatric vaccination, or in certain settings or using a different administration technique, such as intradermal or intranasal, should also be considered.

The training provided in an outbreak situation should still cover all the topics in the core curriculum that are listed below but these should be made context and vaccine specific. Despite being rolled out urgently and at enormous scale, this approach to training and assessment was successfully implemented for the COVID-19 vaccination programme.

Aim and Objectives

Aim

The overall aim of these national standards is to describe the minimum training that should be given to staff involved in any aspect of vaccination so that they are able to confidently, competently, safely and effectively fulfil their role, whether promoting, advising about or administering vaccinations.



Objectives

The aim will be achieved by setting out recommendations for commissioners, providers and trainers so that all those involved in vaccination have access to high quality training that, as appropriate to their role and responsibilities, facilitates them, or helps them to support colleagues, to:

- ensure that their practice is safe and effective
- provide accurate and up to date information about the relevant diseases and vaccines to individuals and/or their parents/carers
- support individuals to make informed decisions about vaccination
- promote public confidence in vaccination
- improve the uptake of vaccination
- access and follow the recommendations detailed in the online version of 'Vaccination against Infectious Disease' (the 'Green Book') and communications from DHSC, UKHSA or NHS England
- demonstrate an understanding of their role and its limitations, and of the legal and professional responsibilities regarding delegation and accountability, for all staff involved (whether the person delegating or the person to whom the task is being delegated)
- know when and how to request advice if required; for HCSWs this must be from a RHCP colleague; for a RHCP this may include expert specialist advice
- give a consistently safe and high standard of care
- demonstrate competence in vaccine storage, administration and recording
- demonstrate competence in recognition and management of anaphylaxis and basic life support
- demonstrate an understanding of appropriate management of adverse reactions

Standards for vaccination training

These are set out in Table One. Please note that everything in column one applies to all vaccinators – both registered and unregistered. Where there are additional considerations for HCSWs, these are stated in the second column. Further details are then provided in the discussion below.

Table One: Standards for vaccination training

	All healthcare staff with a role in vaccination	Additional specific considerations for HCSWs
The staff	Any healthcare worker who advises on and/or administers vaccines must have received specific relevant training and have been assessed as competent by a registered professional who is experienced, up to date and competent in vaccination. They should only administer or advise about vaccinations if they feel competent to do so. Mentorship, close supervision and support strategies for new vaccinators are essential.	HCSWs, and the RHCPs delegating any aspects of vaccination to them, should be clear about their responsibilities, the limitations of the HCSW role and when they should seek help from a RHCP. The HCSW should refer to a RHCP if an individual requires more information to enable an informed decision about vaccination to be made.
The requirement to be trained and supervised	Those new to vaccination should receive comprehensive foundation vaccination training, either through a face-to-face (in person or webinar) taught course or a blended approach of both e-learning and a face-to-face taught course. New vaccinators should be supported by, and have a period of work-based training and supervised practice with, an RHCP who is experienced, up to date and competent in vaccination.	Following completion of training and assessment, HCSWs must continue to be supported and supervised by a registered and experienced healthcare professional who is available to provide advice and leadership where necessary.
The requirement to be assessed	Both knowledge and clinical competence should be assessed before new vaccinators start to give and/or advise about vaccines. This assessment of competence should be recorded. Opportunities for ongoing review and assessment should be provided.	
The training content	The content of the foundation training should include, as a minimum, all the core areas of knowledge listed in Table Two.	
Duration of theoretical foundation training	The duration of foundation vaccination training will depend on the previous experience, knowledge and skills of the vaccinator, their role in vaccination and the vaccine(s) they are to advise on and/or administer. To cover all of the topics in the Core Curriculum in sufficient detail and in order to achieve all the learning outcomes listed in Appendix B, it is likely that for staff who advise on and/or administer a range of different vaccines, the duration of theoretical training would require a minimum of two days (which may include e-learning). Additional pre and post course reading (such as the Green Book and other information resources for healthcare practitioners) is also required. Training for staff who either only administer a more limited number of different vaccine programmes in their role or who have a vaccination aspect to their role but do not administer vaccines, may be tailored specifically to their needs and may therefore be shorter in duration.	

	All healthcare staff with a role in vaccination	Additional specific considerations for HCSWs
Frequency and duration of updates	Keeping up to date should be a continuous process. However, it is recommended that, as a minimum, vaccinators should attend (in person or virtually) an annual update which covers the recommended areas listed in Table Three.	
	More frequent updates may be required if new vaccine programmes are introduced or substantial changes to existing programmes are made.	
	To include all necessary information, update training is likely to need a minimum of half a day although a full day may be required, particularly for those delivering the complete routine national vaccination schedule and dependant on the extent of new information that needs to be covered.	
Access to	All staff with a role in vaccination should have access to:	
national policies, information	 i. national guidance including the latest online version of Vaccination against Infectious Disease (the 'Green Book') 	
and guidance, including any updates to these	ii. official programme letters, information for healthcare practitioner guidance and further programme information available from Vaccination – GOV.UK (www.gov.uk)	
	iii. the monthly national vaccination newsletter Vaccine Update which describes the latest developments in vaccine programmes, policies and procedures	
	iv. operational guidance circulated by NHSE	
	Service commissioners and providers should ensure that timely updates of any changes to policy or practice are provided to all staff with a role in vaccination.	
Access to advice and support	All staff involved in vaccination should know who to contact for expert vaccination advice and support. When new to vaccination, they must have an identified supervisor who is a registered, appropriately trained, experienced and knowledgeable professional in vaccination. The supervisor should ensure the new vaccinator's training and practice meets national standards and reflects current national policy.	The HCSW must be able to identify the appropriate RHCP to whom the patient can be referred if they require more information to enable an informed decision about vaccination to be made. The RHCP who has delegated a role in vaccination to the HCSW is accountable for complying with the principles of delegation (as set
		out in their professional code or standards) and is responsible for the standard of care provided by their team. However, the HCSW is accountable for their own practice. Supervision of HCSWs actively
		involved in vaccination services must be ongoing.

	All healthcare staff with a role in vaccination	Additional specific considerations for HCSWs	
Accountability and delegation	All staff must understand the principles of legal and professional accountability and delegation, and must work within their professional code or standards of conduct.	On completion of vaccination training, the HCSW should only undertake vaccination if they feel	
	If vaccination is to be delegated, the professional who delegates the role of vaccination must be on a relevant professional register, for example the NMC, GMC, GPhC or HCPC.	competent to do so. HCSWs should be supported to decline a request to undertake	
	The RHCP who delegates a role in vaccination to a HCSW must fulfil their professional responsibility:	any duty for which they have not received training and/or that they do not feel competent to	
	for ensuring the HCSW has met the necessary standards of competency and undertaken the recommended training	safely perform. In the event of changes to	
	to remain up to date in all aspects of vaccination (see 'Access to national policies and updates' above).	vaccination policy or practice, suitability of continued delegation to HCSWs should be reviewed since additional training/ assessment/ supervision may be required before they can continue to administer the vaccine(s).	
		Review of delegated roles by a RHCP to a HCSW should be ongoing (that is, a dynamic, continuous process, not a one-off event).	
Compliance/ evaluation	Those responsible for provision of the vaccination service (the employer) should ensure that all staff administering or advising on vaccination have received training that meets these national standards.	RHCPs delegating to HCSWs have a responsibility to ensure that the HCSW's training is up to date and that their work is of the	
	Those responsible for clinical governance should ensure that staff training (at all levels and all aspects) is included in regular audit of the vaccination service.	required standard.	
	Commissioners should ensure that providers are able to confirm that their vaccinators have been trained and assessed.		

Training content

Core areas of vaccination knowledge

All staff involved in vaccination 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.

Table Two: Core areas of vaccination knowledge

Applicable to all staff

- 1. The aims of vaccination, 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 their indications and contraindications
- 5. Current issues in vaccination
- **6.** Communicating with patients, parents and carers about vaccines

- Legal issues as applied to vaccination: consent and legal mechanisms to supply and administer vaccines
- 8. Storage and handling of vaccines
- 9. Correct administration of vaccines
- **10.** Anaphylaxis, basic life support and adverse reactions
- 11. Documentation, record keeping and reporting
- 12. Strategies for optimising vaccination uptake

The core topics listed above are relevant to all vaccinators in any setting where vaccines are given and should therefore be covered in all vaccination training.



Tailoring training to suit the requirements of the vaccinators

The purpose of this guidance is to describe what vaccination training should be provided in order that those who give or advise on vaccination are competent and have a comprehensive, up-to-date knowledge base. It is not intended that these standards impose an onerous requirement on vaccinators or demand on service providers. It is recommended that foundation training and updates are tailored to suit the requirements of the vaccinators to their specific area of practice and the vaccine(s) they deliver.

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 healthcare practitioner. For example, staff immunising in a hospital setting may not need as much detail about ordering and storing vaccines as general practice staff, but they still need to know that vaccines should be kept within the recommended cold chain temperature range.

Similarly, the training given to a healthcare practitioner who only gives Hepatitis B vaccine or influenza vaccine should cover all the topics in the core curriculum, but 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 the vaccinator's knowledge and practice is set within the broader context of the national programme as a whole. Everyone involved in giving or advising on vaccination needs knowledge of the routine vaccination schedule even if they are only giving one specific vaccine. They need to know how that vaccine fits in with others their patient has been given or still needs to receive.

In addition, although listed separately above, the core topics can be combined 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.

Knowledge and competence for those who only give one or a small number of vaccines should be assessed as thoroughly as described subsequently in this document, and annual updates 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 staff require or would benefit from the inclusion of any other topics or additional specific training courses, depending on the particular setting or role. For example, practitioners responsible for overseeing the local implementation of the vaccination programme may benefit from training in audit and critical incident management.

Additional topics to consider include:

- data collection and interpretation of coverage data
- taking a leadership role in providing an effective and high-quality vaccination service
- how to audit and critically evaluate the vaccination service provided
- ethical issues in vaccination
- responding to serious adverse events following vaccination
- incident management including reporting mechanisms and identifying and applying lessons learned
- dealing with complex vaccination queries
- implementing and evaluating ad hoc campaigns for outbreak response or prevention
- how to plan and develop training and methods of assessment in the local setting that meet the national minimum standards for vaccination training
- media training and effectively communicating with the public
- critical appraisal of research and literature and electronic library methods
- professional issues including delegation, supervision, support and mentorship of new vaccinators and HCSWs
- the role of the HCSW as a vaccinator (including role limitations and the role of others in vaccination) and support required (including supervision, mentorship and reflection)

Trainers and those responsible for co-ordinating, managing and leading vaccination services at local level

Those responsible for providing training require an in-depth, up-to-date knowledge of the subject areas they are to teach. It is therefore recommended that these staff and those responsible for co-ordinating, managing and leading vaccination 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. These will also give them the opportunity to maintain, update and further develop their knowledge. Examples include the annual National Immunisation Network (NIN) conference run by the UKHSA's national vaccination team, the annual Fundamentals of Vaccination course run by the UKHSA and the UCL Institute for Child Health, the annual National Vaccination Conference in Manchester and other local, regional or national study days held by different organisations and professional bodies across the country.

The self-directed methods suggested below for remaining up to date should also be used.

Context-specific training

Practitioners may also require additional training depending on the vaccine(s) they give and the setting in which they give it. This may include considerations when vaccinating children, when vaccinating in a home or community setting or when vaccinating individuals with complex medical conditions or social circumstances.

There may also be certain situations where a generic vaccination training course alone would not be sufficient. For example, those who give occupational health vaccinations will require training on risk assessment and follow up, such as when post vaccination testing is required, and those who give travel vaccinations will also require training on risk assessment in addition to specific training for giving general travel health advice.



Provision of training

Ideally, training should be provided at a local level and led by local trainers, experts and leads as this may be beneficial for the following reasons:

- it enables vaccinators to raise area-specific issues for further discussion, for example, variations in uptake and coverage and the possible reasons for this
- it also gives vaccinators the opportunity to meet those leading on vaccination in their locality so that they know who to contact for support and advice
- certain areas such as commissioning and organisation of the vaccination services may have some degree of local variation

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.

In many areas, it may be possible to enrol local NHS organisation educators and training departments to establish and take an organisational lead in vaccination training. Providers of further and higher education may also offer suitable courses. Collaboration between these educational establishments, local healthcare and public health organisations and the Royal Colleges and professional 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.

Training courses should be offered with sufficient regularity that new vaccinators are able to promptly access training when required.

E-learning

E-learning is now an established part of many educational programmes as it allows the efficient delivery of the required content to large numbers of people. It can also provide an effective mechanism through which vaccinators can access training provided they are given specific, protected training time in which to undertake this.

Comprehensive vaccination e-learning programmes (currently, specific flu and COVID programmes and a general immunisation programme which covers all of the core topics) are available to all practitioners with a role in vaccination on the e-Learning for Healthcare website, free of charge with open access. They have been written in line with the recommendations made in these training standards and are relevant to healthcare practitioners with a role in vaccination whatever their background and the setting in which they give or advise on vaccination. They are useful both for those new to vaccination and for those with prior knowledge and experience as they can read through the relevant knowledge sessions for refresher training or undertake the assessment sessions to check their knowledge.

However, it is recommended that e-learning is not the only way in which vaccinators receive their training. In terms of theoretical training, it is always preferable to include an element of interactive learning (whether in person or via an online meeting platform).

Where appropriate or necessary, a blended learning approach can be utilised with an e-learning course(s) used alongside (prior to or following) face-to-face (in person or virtual) interactive sessions to help ensure participants achieve all the required learning outcomes and consolidate their knowledge.

Whilst, through necessity, the theoretical aspects of the training for COVID-19 vaccination were mostly delivered via e-learning, there was also a requirement to undertake face-to-face practical training and assessment. These elements are essential for training for all vaccination programmes and elearning alone should not be considered sufficient training before undertaking a role in vaccination.

Pre-course preparatory reading

Since there is a lot to cover in vaccination training, much of which may be complex or new, it is recommended that pre-course reading material is provided. This will also serve as a useful reference tool after the course.

Training materials

Trainers are encouraged to utilise a variety of different teaching methods to make vaccination 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 and quizzes could be used. Trainers may wish to make use of the training materials on the UKHSA Vaccination page which contains slide sets, information for healthcare practitioner guidance, links to videos and e-learning and an immunology animation. Other websites which provide useful information, animations and videos include the Vaccine Knowledge Project, London School of Hygiene and Tropical Medicine Vaccine Centre and the British Society for Immunology.

Updates

The national vaccination programme is subject to continual evaluation and review by the Joint Committee on Vaccination and Vaccination (JCVI) in response to new and emerging evidence and the availability of new and reformulated vaccines, resulting in regular changes to vaccine policy. In recent years the national programme has undergone significant expansion, the schedule has become more complex and it will continue to evolve. To ensure the ongoing delivery of a high quality, safe and effective national vaccination programme, all staff who have completed their foundation vaccination training require access to regular and ongoing update training. Updates should also provide an opportunity for vaccinators to identify any gaps in their knowledge and competence and address any queries or challenging issues that have arisen in their practice.

It is therefore recommended that a regular and ongoing programme of updates should be provided for all vaccinators, a minimum of once yearly.

These updates should include the areas listed in Table Three, relevant to the vaccines they deliver and their role, and cover any recommended changes to practice and the most up to date policies and guidelines.

Table Three: Vaccination Update Training

- **1.** The aims of vaccination, 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 their indications and contraindications
- 5. Current issues in vaccination
- **6.** Communicating with patients, parents and carers about vaccines
- 7. Legal issues as applied to vaccination: consent and legal mechanisms to supply and administer vaccines
- 8. Storage and handling of vaccines

Specific training in Basic Life Support and anaphylaxis recognition and management should also be undertaken annually or as per employer's stipulations. This training is generally provided separately to vaccination training as it is relevant for other areas of work that a vaccinator may be involved in.

Where major changes are made to existing programmes or new vaccines are introduced, additional training sessions should be organised for the relevant staff.

Face-to-face updates provide an excellent opportunity to interact with other vaccinators, work through scenarios and discuss any clinical issues that are arising in practice. Team meetings also provide an ideal opportunity for vaccination update sessions. In addition, updating can also be undertaken through self-directed learning and providers should give practitioners time to do this. Methods for this may include:

- subscribing to the monthly UKHSA publication Vaccine update
- reading the 'Information for Healthcare Practitioner' documents on GOV.UK
- reading relevant journal articles
- reading any new communications and information materials from DHSC, NHS England and UKHSA
- reading any recently updated chapters of the Green Book

- undertaking the assessment sections of the vaccination e-learning programme
- working through the competency assessment tool either alone or with a supervisor or colleague to identify if there are any areas whether there is a need to update or further their knowledge to ensure all areas can be confidently met
- attending or listening to online updates such as webinars

Updating should be seen as a continuous ongoing process rather than purely as a one-off annual event. A blended approach of face-to-face and self-directed learning is recommended.

Supervision and assessment

Assessment of knowledge

Knowledge following training should be assessed and those responsible for training and/or supervising staff should develop effective strategies for accomplishing this.

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

The question-led options could be used within face-to-face ('classroom' based or via an online platform) and/ or e-learning training sessions as well as within the clinical setting, whilst logs/diaries/portfolios are useful tools for monitoring supervised practice, and for the assessment and ongoing maintenance of competence.

Knowledge assessments should be recorded.

Supervised practice

In addition to acquiring theoretical knowledge, vaccinators need to have time to develop clinical skills in vaccination and apply their knowledge in practice.

A period of supervised practice to allow observation of, and development of clinical skills and application of knowledge to practice is essential. Supervision for new vaccinators and support for all vaccinators is critical to the safe and successful delivery of the vaccination programme and work-based learning is a vital component of all vaccination training.

It is recommended that before starting to give vaccinations, all new vaccinators should spend time with a registered healthcare professional who is competent, knowledgeable, up to date and a clinically experienced confident vaccinator. The new vaccinator should have the opportunity to observe an agreed minimum number of procedures and discuss relevant issues with the registered professional.

Whilst there is no finite evidence as to how many times supervised practice should occur, both the mentor and the new vaccinator need to feel confident that the new vaccinator has the necessary skills and knowledge to advise on and/or administer each of the vaccines they are to deliver safely and competently.

Reflection, discussion and support are recommended to ensure optimum learning.

Supervision should be ongoing, and competence should be regularly assessed via performance review or appraisal.

Assessment of clinical competence

It is recommended that all new vaccinators complete a competency assessment such as the one in Appendix A for formal assessment and sign-off of their clinical competency. This competency assessment could also be used as a tool to ensure that the period of supervised practice is structured and robust and will provide a clear, comprehensive checklist so each step of the vaccination consultation is considered.

The competencies required will depend on the individual service area and the specific role and range of vaccines given by the vaccinator but the tool is suitable for use in all areas. Additional competencies, as required by locality or service area, can be added or adapted as necessary. Details about how to use the competency assessment are provided in Appendix A.

For new vaccinators, theoretical learning should be sequenced with their work-based learning so that by the time of assessment of competence, both aspects of training have been completed.

Supervisors

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

Evidence of competence

Vaccinators 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 vaccination training courses and updates. This will provide staff with a means to show evidence of completion of training and achievement of competence to both current and future employers. This will be helpful to training providers and for RHCPs, it will also provide useful evidence of continuing professional development for professional revalidation.

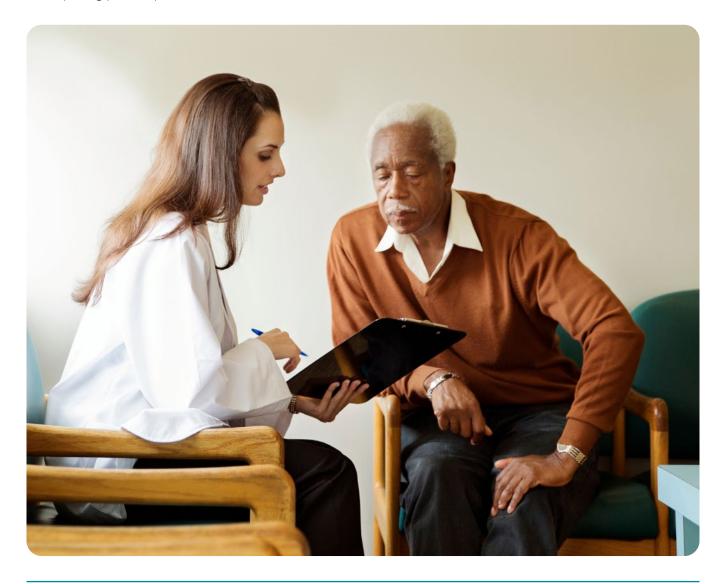


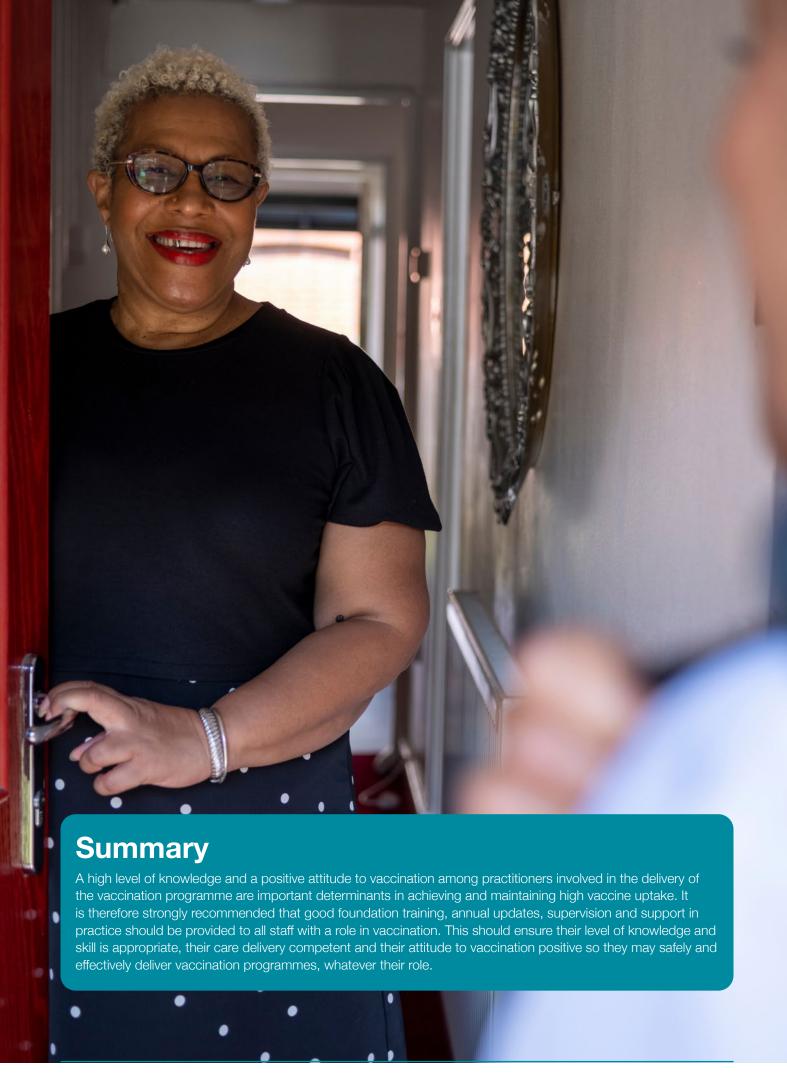
Establishing training

Successful implementation of the standards will require:

- awareness from commissioners and providers of the importance of vaccination training and why funding it and releasing staff to access it should be a priority
- provision of adequate resources to support training including staff to supervise practice and assess competency
- identified leadership, coordination, collaboration, facilitation and commitment to training in service areas where vaccinations 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 vaccinators are accessing and completing training and assessment
- identification of any barriers to vaccination training and putting plans in place to address them

- employers allowing adequate protected and dedicated study time to those that need to undertake vaccination training. Consideration should be given to the fact that new vaccinators will require more time for training than those who are updating their knowledge
- vaccinators to be given access to relevant technology to be able to undertake e-learning and participate in online training sessions
- necessary support and supervision for staff, and robust processes, structures and routes of escalation in place so that staff can proficiently and safely carry out their role
- provision of a working environment in which vaccinators are able to inform their employer if they feel they require further training and employers who are receptive and able to facilitate this





Appendix A

Vaccinator competency assessment tool

Supervision and assessment of competency

A period of supervised practice to allow observation of, and development of skills in vaccine administration and application of knowledge to practice is essential. Supervision for new vaccinators and support for all vaccinators is critical to the safe and successful delivery of the vaccination programme. The supervisor must be a registered, appropriately trained, experienced and knowledgeable practitioner in vaccination.

All new vaccinators, and those returning to vaccination after a prolonged interval, should complete this competency assessment for formal evaluation and sign-off of their clinical competency. They should be supervised administering the vaccine(s) until both they, and their supervisor or trainer, feel confident that they have the necessary knowledge and skills to administer vaccines safely and competently.

Experienced vaccinators should use this competency tool to self-assess that they are able to meet all the competencies listed and confirm that they have the knowledge and skills necessary to administer vaccines. This will be required to work to PGDs and Protocols.

Once signed and dated, all vaccinators should retain the competency tool in their training records.

The competency assessment tool has been divided into 3 areas:

- 1. Knowledge
- 2. Core clinical skills
- 3. The clinical process and procedure for vaccine administration

Vaccinators should be assessed against the competencies relevant to the role assigned to them. It is recognised that not all competencies will be relevant to all staff, for example if they have been assigned a role in vaccine administration only and are not responsible for assessing suitability for vaccination and taking consent. Some competencies may also only be applicable to registered staff. However, competencies that have been marked as 'not applicable', but which become applicable if the vaccinator is given additional responsibilities or a change in role, can be assessed at a later date without having to compete a whole new competency tool. Multiple supervisors may sign off competency where required (for example, if not all competencies can be assessed at one time) and additional competencies can be added if 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, depending on the previous experience of the vaccinator. Where a particular competency is not applicable to the individual's role at the time of assessment, indicate 'not applicable' (NA).

The vaccinator should complete the self-assessment column and then, if they are new to vaccination, or returning to vaccination after a prolonged interval, share it with their supervisor or assessor.

As different vaccines have some important differences between them (for example, the vaccine components, how they should be stored and prepared, the dosage and so on), a section at the end is included so that vaccinators can add the name of the vaccine they are being assessed or self-assessing for and sign against each individual type of vaccine. Where the competence applies to all vaccines (for example management of anaphylaxis, intramuscular injection technique), individual assessment of competency for each vaccine is not required. Vaccinators may wish to use a fresh competency assessment tool when they undertake training to give a new vaccine.

The supervisor carrying out the assessment should:

- review the vaccinator's self-assessment, discussing any areas that are identified as 'need to improve' and the relevant action plans
- observe their performance as they provide vaccinations or 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 vaccinator to develop an action plan that will enable them to achieve the required level of competence and plan a further assessment
- acknowledge if they and/or the vaccinator decide that they are not suitable for the role and communicate this to the employer

When the supervisor and vaccinator agree that the vaccinator is competent in all the relevant areas, they should both sign the section at the bottom of the assessment.



Part 1. Knowledge

	npetency assessment tool for health care workers na role in the provision of a vaccination service	Applicable to role assigned (yes or no)	Self-assessment Record: met (M) or needs to improve (NI) (initial and date)	Supervisor review Record: met (M) or needs to improve (NI) (initial and date)
1a	Can provide evidence of attendance at a specific, comprehensive vaccination training course and/or of completion of a vaccination e-learning programme. The training should cover the topics detailed in the "Core Curriculum for Vaccination Training" (state the name of course/type of training attended).			
1b	Has successfully completed and passed a knowledge assessment, for example, e-learning assessment or an end-of-course test.			
1c	Able to access the online Green Book and other relevant vaccine guidance, for example, communications from DHSC/UKHSA/NHSE, JCVI statements, Vaccine Update, UKHSA Information for Healthcare Practitioners guidance on new or revised vaccine programmes, the UKHSA algorithm for individuals with uncertain or incomplete vaccination status, specific vaccine PGDs and other resources as appropriate.			
1d	Knows who to contact for advice if unsure about vaccination schedules, vaccine spacing and compatibility, eligibility for vaccines or if a vaccine error occurs (for example, local Screening and Immunisation team, local Health Protection Team, other locally available vaccination lead or relevant consultant team).			
1e	Able to access current information on other countries' schedules (e.g. World Health Organisation (WHO) website) if required, and understands how and when it is appropriate to use them. Can advise individuals and/or parents/carers if any additional vaccines are needed.			
1f	Able to discuss the relevant national and local vaccination 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 from their service (e.g. BCG or some travel vaccines).			
1g	Able to advise on appropriate safe, timely administration of the vaccine(s) required by the patient.			
1h	Understands the different types of vaccine, is able to state which vaccines are live, which are inactivated/non-live and why it is important to know this.			
1i	Aware of the different routes of administration e.g. injected, intranasal or oral and why using the correct route matters.			
1j	Able to explain the general principles of vaccination e.g. why primary, booster and/or additional doses may be required, why intervals need to be observed between doses and why certain vaccines (e.g. influenza) need to be given annually.			
1k	Able to explain the basics of how the vaccine works, what it contains and why, any contraindications or precautions and possible side effects and how to treat them.			
11	Aware of local and national targets for vaccination uptake and why vaccine uptake data is important. If appropriate, knows where to find uptake data for their area of practice			

Part 2. Core skills for vaccination

	Competency assessment tool for health care workers with a role in the provision of a vaccination service		Self-assessment Record: met (M) or needs to improve (NI) (initial and date)	Supervisor review Record: met (M) or needs to improve (NI) (initial and date)
2a	Is up to date with requirements for anaphylaxis and basic life support (BLS) training (normally recommended annually or as per employers' stipulations).			
2b	Aware of how to respond to an immediate serious adverse event following vaccination and knows the whereabouts of anaphylaxis and emergency care equipment and how and when to use it.			
2c	Can explain incident response, knows where to obtain guidance and advice and can describe the reporting process in case of a procedural error, needlestick injury, breach of infection control measure and so on, as per local protocol.			
2d	Demonstrates good practice in hand hygiene and relevant infection prevention and control. Uses appropriate no-touch technique when preparing vaccines and handling injection equipment (e.g, syringes, needles) to prevent contamination and infection.			
2e	Disposes of sharps, vaccine syringes and vials and other vaccine equipment safely in line with local protocol and national guidelines.			
2f	Demonstrates knowledge and understanding of the rationale for and importance of 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.			
2g	Works within local protocol or standard operating procedure (SOP), understands limitations of own role and able to refer on for advice appropriately.			

Part 3. Clinical process and procedure

	npetency assessment tool for health care workers ar role in the provision of a vaccination service	Applicable to role assigned (yes or no)	Self-assessment Record: met (M) or needs to improve (NI) (initial and date)	Supervisor review Record: met (M) or needs to improve (NI) (initial and date)
3a	Checks individual's identity and their records prior to vaccination to ascertain previous vaccination history, suitability and eligibility 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	Demonstrates knowledge and understanding of contraindications and precautions for the vaccines to be given and is able to assess appropriately for these. Refers to relevant registered professional if in doubt.			
3с	Can explain which vaccines are to be given and able to answer patient's and/or parent/carer questions, referring to leaflets to aid explanations or discussion as appropriate, and using interpreter if necessary to ensure patient/parent/carer is informed. Knows who to refer to/ contact if further detail or advice is required.			
3d	Able to clearly and confidently discuss the benefits and risks of vaccination and able to address any concerns patients, parents and/or carers may have.			
3e	Aware of, and able to discuss, any current issues or misconceptions surrounding vaccination.			
3f	Demonstrates knowledge of consent requirements and any relevant issues such as the capacity to consent and the age of the individual (e.g. Gillick competency, the Mental Capacity Act 2005). Ensures consent is obtained prior to vaccination and is appropriately documented.			
3g	Checks that there is an appropriate legal authority to supply and administer the vaccine such as: they are a prescriber, the vaccine has been prescribed to a specific patient via a signed prescription or Patient Specific Direction, or the vaccinator is authorised to administer the vaccine in accordance with a Patient Group Direction (PGD), Written Instruction for Occupational Health or National Protocol.			
3h	Checks the presentation of vaccine products, the expiry date, that they have been correctly stored prior to use and prepares them according to the vaccine manufacturer's instructions in the Summary of Product Characteristics (SPC).			
3i	Able to state correct dose, depending on vaccine type, and draw it up accurately.			
3j	Chooses the correct administration route for the vaccine(s) to be delivered.			
3k	Chooses appropriate vaccination site(s) e.g. use of anterior lateral aspect of the thigh in babies under one year and/ or deltoid muscle of upper arm in older children and adults for intramuscularly administered vaccines, and positions patient appropriately.			

	npetency assessment tool for health care workers ar a role in the provision of a vaccination service	Applicable to role assigned (yes or no)	Self-assessment Record: met (M) or needs to improve (NI) (initial and date)	Supervisor review Record: met (M) or needs to improve (NI) (initial and date)
31	Demonstrates awareness of what to check before administering vaccines to patients with bleeding disorders or who are taking anticoagulants.			
3m	Demonstrates correct intramuscular technique e.g. for administration of inactivated influenza vaccine.			
3n	Demonstrates correct subcutaneous technique where this technique is required (rarely indicated).			
30	Demonstrates correct intradermal technique e.g. for administration of BCG vaccine (or fractional doses of mpox vaccine when required).			
Зр	Demonstrates correct intranasal technique e.g. for administration of live influenza vaccine to children.			
3q	Demonstrates correct oral technique e.g. for administration of live rotavirus vaccine to babies.			
3r	Demonstrates an understanding of the procedure for the reporting of any vaccine reactions and knows how to report using the MHRA's Yellow Card Scheme.			
3s	Completes all necessary documentation, recording type and product name of vaccine, batch number, expiry date, dose administered, route and site(s) used, date given and name and signature of vaccinator.			
3t	Demonstrates good record keeping and understands the importance of making sure vaccine information is accurately recorded on relevant data systems such as GP data system, reported to local Child Health Information System (CHIS), recorded in digital or hand held records such as the Personal Child Health Record (PCHR) (Red Book), Record a vaccination service (RAVS) or maternity systems and notes and knows to how to report unscheduled vaccinations or where vaccines are given outside of GP premises.			
3u	Advises patient or carer on what to expect after vaccination as appropriate (for example, local injection site reactions, fever) and management of these. Provides patient/parent/carer with a copy of post-vaccination			
	advice sheet such as the NHS leaflet 'What to expect after vaccination' or the product's Patient Information Leaflet (PIL) if appropriate.			
3v	Demonstrates an understanding of own limitations and knows where to refer patients where there may be more complex requirements, or a more experienced vaccinator is required.			

(Record any actions roonce met)	equired to meet any cor	npetencies assesse	ed as 'needs to improve	'. Sign and date these
		Job	title:	
Name of individual: has the appropriate k			title:dvise on and/or adminis	
Name of individual: has the appropriate keet stated below. Name of vaccine	nowledge, skill and com			
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Appendix B

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

Core knowledge area	Learning outcome	Learning objectives	Session content should include
1) The aims of vaccination, national vaccine policy and schedules	Able to explain the aims of vaccination and describe national vaccine policy and schedules	 The practitioner will be able to: 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 vaccination programmes are monitored through the use of surveillance Explain how vaccine uptake is monitored and why this is important Describe any local variations to vaccination policy if appropriate Design appropriate schedules for individuals with unknown or uncertain vaccination status and for patients in clinical risk groups who may require addition vaccinations Demonstrate the ability to access the online Green Book and relevant vaccine policy and guidance documents 	 Relevant history of vaccination Concepts of control, elimination and eradication of vaccine preventable diseases The role of surveillance in designing and monitoring vaccination programmes Role of the JCVI and how their recommendations inform vaccine policy The role of different agencies and personnel in vaccination How vaccination programmes are commissioned How the number, timing and spacing of doses is decided upon The construction of the National Vaccination schedule Current published policy e.g. Green Book, DHSC/UKHSA/NHS England communications 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 vaccination advice
2) The immune response to vaccines and how vaccines work	Able to explain the immune response to vaccines and describe how vaccines provide individual and community protection	 The practitioner will be able to: Explain the difference between innate, passive and active immunity 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 	 Active and passive immunity, cell-mediated and antibody-mediated immunity, antibodies and antigens 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

Core knowledge area	Learning outcome	Learning objectives	Session content should include
3) Vaccine preventable diseases	Able to describe and recognise the main features of vaccine preventable diseases and the nature and frequency of their acute symptoms and potential long term complications	 The practitioner will be able to: 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 	 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 Current and historical vaccination uptake and disease trends
4) The different types of vaccines, their composition and their indications and contraindications	Has knowledge of the different types of vaccines used	The practitioner will be able to: Identify the types of vaccine used to prevent the diseases relevant to their practice (immunoglobulin, live, inactivated, polysaccharide, conjugate, mRNA, recombinant) Explain the differences between a live and an inactivated/non-live vaccine Describe which groups of patients cannot receive live vaccines and why State when immunoglobulin is indicated Describe how vaccines trials are carried out before a vaccine is licensed and how safety and efficacy are monitored following licensure 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 components of a vaccine and why they are included	 Immunoglobulins, live and inactivated vaccines, polysaccharide and conjugate vaccines, mRNA and recombinant 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 Which vaccines are recommended in pregnancy and which are contraindicated How and when to report suspected vaccine associated adverse events

Core knowledge area	Learning outcome	Learning objectives	Session content should include
5) Current issues in vaccination	Knows about relevant and current issues/misinformation in vaccination	 The practitioner will be able to: Describe any issues currently relevant to the vaccines they give/advise on Address any vaccine misinformation 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 Identify suitable information sources that patients/parents/carers may wish to view for more information 	 Importance of keeping updated How and where to find information (local and national sources of advice) Assessing the reliability of vaccine information sources Media portrayal and social media discussion of vaccine news stories
6) Communicating with patients, parents and carers	Can effectively communicate with patients, parents and carers and other relevant people about vaccination	 The practitioner will be able to: 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 the benefits and any potential risks associated with vaccination Describe how the way they communicate with patients/parents/carers will affect vaccine confidence and acceptance Tailor the information they give to the individual patient/parent/carer's needs Provide patients/parents/carers with appropriate vaccine information leaflets and are familiar with the content of the leaflets themselves Direct patients/parents/carers to reliable sources of written and electronic information both locally and nationally Engage with relevant individuals within their area of practice where vaccines need to be given e.g. school staff/employers/prison staff/care homes etc to explain which vaccinations are indicated and why 	 Issues that affect and influence patient/parents/carers in their vaccine decision making The effect of media reporting on patient and parental/carer views and acceptance of vaccination Responding to concerns, commonly asked questions and misconceptions Risk communication Provision of suitable vaccine information materials Local and national sources of further information and advice for parents

Core knowledge area	Learning outcome	Learning objectives	Session content should include
7) Legal issues as applied to vaccination: consent and legal mechanisms to supply and administer vaccines	Understands the legal aspects of vaccination	 The practitioner will be able to: 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 different legal mechanisms for administering a vaccine and state when each should be used Describe the clinical governance issues which relate to vaccination 	 Current legal requirements for consent, including 'Gillick' competence and looked after children. Data protection (Data Protection Act, Caldicott) Patient Specific Directions, Patient Group Directions, prescriptions, Written Instructions and National Protocols Licensing of vaccines and off-label use Documentation Professional accountability
8) Storage and handling of vaccines	Follows correct procedures for storage and handling of vaccines	 The practitioner will be able to: 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 fridges, regular checks for expired vaccine and ordering appropriate vaccine stock 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 	 Effects of temperature on potency, efficacy and adverse events of vaccines Daily monitoring and recording of vaccine fridge temperature records Correct use and maintenance of designated purpose-built vaccine fridge and data loggers Importance of stock rotation and regular checks for expired vaccine Ordering appropriate vaccine stock (ImmForm, manufacturers) Management of breakdowns in the cold chain Disposal of heat and cold damaged vaccine Setting up and using cool boxes for transporting vaccines to community/school/etc vaccination sessions Management of cold chain during a vaccination clinic/session Responsibility for ensuring that all vaccines administered have been stored correctly Local and national vaccine storage and handling recommendations and requirements

Core knowledge area	Learning outcome	Learning objectives	Session content should include
9) Correct administration of vaccines	Able to reconstitute and administer vaccines correctly	The practitioner will be able to:	 Dosage and reconstitution of relevant vaccine(s) Preparation and disposal of vaccination equipment and used vaccines Assessment of fitness and suitability for vaccination Current recommendations for route, needle size and injection site for administration of vaccine based on effects on efficacy and local reactions
		 Demonstrate appropriate selection and preparation of vaccine equipment 	
		Demonstrate good knowledge and practice of infection prevention and control	
		Explain how to prepare and dispose of vaccinations and vaccination equipment	
		Demonstrate safe practice in checking the vaccine to	 Correct administration techniques for safe and effective vaccination Relevant infection prevention and control measures relating to vaccination Sharps legislation and avoidance and management of needle stick injury
		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 vaccination site and needle size (where applicable)	
		Demonstrate correct administration technique for the vaccine to be given (oral, intranasal, subcutaneous, intramuscular, intradermal injection)	
		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	

Core knowledge area	Learning outcome	Learning objectives	Session content should include
10) Anaphylaxis, basic life support and adverse reactions	Able to manage anaphylaxis and other adverse events appropriately	 The practitioner will be able to: Give evidence of anaphylaxis and basic life support training within the last 12 months Define and recognise an adverse event Describe 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 	 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 following vaccination Use of MHRA Yellow Card reporting system
11) Documentation, record keeping and reporting	Correctly documents and reports all vaccines given	The practitioner will be able to: Correctly document vaccines given (type of vaccine, batch number, expiry date, date given and injection site) in all relevant records (personal medical record on GP system, Personal Child Health Record (red book), Child Health Information system, maternity notes, 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 and how this is collected Describe the role of the Child Health Information System in record-keeping, calling and re-calling for vaccination Report incidents and errors	 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

Core knowledge area	Learning outcome	Learning objectives	Session content should include
12) Strategies for optimising vaccination uptake	Able to identify and implement strategies for improving vaccine uptake	 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 vaccination clinics to maximise uptake and take into consideration any factors which may affect uptake Confidently encourage other healthcare professionals to promote vaccination 	 Identification of barriers and obstacles that may prevent uptake of vaccination and impede efficient vaccine delivery Development of strategies to overcome barriers and improve vaccination 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 How to effectively address non-attendance

About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation health secure.

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