Health Protection Agency

Core Curriculum for Immunisation Training

DHSSPS
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National Public Health Service for Wales
Gwasanaeth Iechyd Cyhoeddus Cenedlaethol Cymru

Royal College of Nursing

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The advisory group consisted of individuals from different professional backgrounds. This enabled the group to draw on a wide range of experience in many different areas of immunisation policy and practice. A wider consultation process was then carried out to ensure that the views of professionals in all areas were represented. We gratefully acknowledge the advice and recommendations given by the following organisations and the wider consultation that they carried out with their members on our behalf:

- Association of NHS Occupational Health Nurses
- City University Public Health and Primary Care Unit
- Community Practitioners and Health Visitor Association
- Health Protection Scotland (formerly the Scottish Centre for Infection and Environmental Health)
- National Association of Primary Care Educators
- National Pharmaceutical Association
- National Public Health Service for Wales
- NHS Alliance
- Northern Ireland Regional Immunisation and Vaccination Committee
- Primary and Community Care Pharmacy Network
- Public Health Medicine Environment Group on behalf of the Faculty of Public Health
- Royal College of General Practitioners
- Royal College of Midwives
- Royal College of Nursing
- Royal College of Paediatrics and Child Health

These Standards have been approved for use in England, Northern Ireland and Wales.
Further consultation is underway on their application in Scotland.

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Contents

Introduction

This document should be read in conjunction with the *National Minimum Standards for Training*.

The Core Curriculum lays out the essential core topics which should be incorporated into all immunisation training.
It is intended that this be used as a minimum framework around which trainers can build their training programme.
It therefore does not dictate how immunisers should be taught or assessed since flexibility to incorporate local needs and existing training programmes is important.
Whilst suggestions are made as to assessment methods and minimum periods of clinical supervision, these are intended to be minimum guidelines only and decisions should be made by local immunisation teams both as to these and to course delivery.

Guidance for Trainers

Teaching

Who needs training in immunisation?

All health professionals who become involved in immunisation in any context, whether administering or advising, should receive training in immunisation. This will include practice nurses, health visitors, school nurses, community nurses, specialist nurses such as TB nurses, paediatric and A&E nurses, GPs, paediatricians, pharmacists and occupational health professionals.

Although this Core Curriculum is primarily written for those professionals in primary care settings who carry out the majority of immunisations, training in immunisation ideally needs to be included in under-graduate and post-graduate nursing, midwifery, medical and pharmacy training since vaccinations are also given in many other areas such as in A&E departments, paediatric wards and neonatal units and many different professionals are involved in advising about immunisation.

How should immunisation training be delivered?

Ideally, immunisation training should take place at a local level and be led by local trainers. By asking local experts to provide training, it enables immunisers to raise local issues for further discussion. It also gives immunisers the opportunity to meet those leading in immunisation so that they know whom to contact for support and advice. Those at a local level with particular responsibility for training include the Primary Care Trust (PCT) or Primary Care Organisation (PCO) Immunisation Leads, Immunisation Co-ordinators, Community Paediatricians, Consultants in Communicable Disease Control (CCDC) and other members of local Health Protection and Primary Care Teams. They should ensure that adequate basic training and updates are provided locally and many will be involved in delivering the training.

Local speakers are valuable as they have a good working knowledge of local immunisation issues and will therefore make training more relevant for the immunisers. Areas such as clinical governance and record keeping will have some degree of local area variation and are therefore best taught at local level. It would also be beneficial, where possible, to involve a variety of local specialist speakers such as immunologists, pharmacists, child health computer staff, etc. External speakers may be required to cover specific topics and to provide an opportunity for local staff to meet national authorities on the subject area.

What to teach

Training programmes should be designed to incorporate all the core topics as described in this Core Curriculum. Trainers should ensure that the content of each session enables the trainee to meet the learning objectives specified for each topic. What is taught may depend on the professional group receiving training and the level of the training being provided.

Training should also reflect local needs to include, where necessary, specific additional training in areas such as travel immunisation. Trainers may wish to include skills workshops for teaching practical skills

Accreditation

It is hoped that the basic framework of the core curriculum will allow and encourage the inclusion of immunisation training in specialist training programmes for nurses and health visitors, GP vocational training courses and to become part of undergraduate education for nurses, midwives, doctors and pharmacists. The Core Curriculum could also be used by universities who wish to set up post-graduate courses or allow university accreditation of local training courses.

Local immunisation trainers could work with PCT/PCO Education and Training Leads, Lecturer Practitioners and local universities to develop well-structured training courses which may be accredited for Continuing Professional Development (CPD) by the relevant Royal Colleges.

Accreditation may also encourage attendance.

Monitoring attendance

PCTs should monitor attendance as part of clinical governance. Monitoring and recording attendance is also useful for carrying out audit of the immunisation service against the National Minimum Standards for Immunisation Training and for identifying which groups of professionals are not accessing training. This will help to enable identification of any barriers encountered to attending training and the development of strategies to overcome these.

Certification

Providing certification of attendance of a basic immunisation training course would be beneficial for immunisers both as evidence of CPD and also as documentary evidence for new employers when immunisers move from one place of employment to another.

Training materials

The online edition of the Department of Health's *Immunisation against Infectious Disease* (the 'Green Book') is effectively the course manual since one of the main objectives of the Standards is to promote countrywide consistency by ensuring that the Department of Health recommendations are implemented at local level by all involved in immunisation. Thus the intention is to make sure that all immunisers are familiar with vaccine policy and practice as detailed in the Green Book. CMO/CNO/CPO Letters should be also be used where recommended changes to vaccine policy occur. Since both these and the Green Book may have insufficient detail for some aspects, they should be complemented with the wide range of immunisation information and training material now available.

Training resources will be developed and made available through outlets such as the Health Protection Agency website (http://www.hpa.org.uk/). This website will include training materials such as PowerPoint presentations, and a list of books, key journal articles, specific specialist publications, videos and website links (e.g. DH and NHS Immunisation Information, World Health Organisation, etc). It is hoped this can be developed in the future to include an on-line assessment facility.

Where to access further teaching resources and references

The references listed under each core topic in the Core Curriculum are suggested key references only and are not intended to be a complete list of all available resources for that topic area. Many more references can be accessed through these key references and for some topics, it may be more appropriate to use local policies and documents.

Using different teaching methods

Question and answer sessions, quizzes, videos, critical incident management scenarios, role play and practical workshops are useful ways to vary and enhance immunisation training.

Length of basic training

It is proposed that initial basic training courses are a minimum of two days in length since it will require at least this amount of time to cover the topic areas in sufficient detail.

Supervised clinical practice

Supervised clinical practice helps to ensure the integration of theoretical knowledge with clinical practice. Those in charge of immunisation training should set a minimum amount of time (for example two immunisation clinic sessions) that all new vaccinators should spend with a competent practitioner who has attended a comprehensive immunisation course and is experienced in giving and advising about immunisations.

Assessment

Those responsible for training need to develop effective strategies for assessing both theoretical knowledge and clinical competency.

Assessment of knowledge

Following attendance of a training course, the participants' knowledge should be assessed. This may be done in a number of ways – for example, through a short multiple-choice answer test. This could be an informal test, either completed at the end of the course or at home afterwards. It may be helpful to link accreditation of the learner to completion of such an assessment.

Assessment of clinical practice

Assessment of clinical practice should involve observation of the new vaccinator during a minimum number of vaccinations or whole clinic sessions. This assessment could consist of a number of assessed clinical competencies of relevant clinical skills and should include the skills listed in the Appendix as a minimum. Those responsible for training may wish to add to these to include more detail and knowledge of local policy.

Training updates

Provision of a regular and ongoing programme of updates for those who have completed the initial immunisation training should be seen as an important priority since policy and recommendations in immunisation change frequently as new vaccines are developed and introduced and as surveillance alerts policy makers to changes in the pattern of disease. The regular advent of news stories of issues such as thiomersal and MMR and the publication of new research mean that immunisers need regular opportunities to stay up to date.

What to include

Update sessions should cover any recommended changes to practice and the most up to date policies and guidelines. The following areas could be included:

- Current issues in vaccination
- Recent epidemiology of vaccine preventable diseases
- Any changes to the National Immunisation Schedule
- Any changes to legislation relevant to vaccination
- Anaphylaxis recognition and management
- Review of current practice and identification of areas for improvement
- Q&A session for commonly-encountered problems in practice

How often should updates be held?

As a minimum, yearly updates should be provided for all immunisers who have completed a basic immunisation course. It is likely that to include all the areas listed above, this will require the equivalent of a whole day or two half-day sessions.

Evaluating and auditing training

Training days should always be evaluated by attendees so that programmes can be regularly modified and improved to reflect the needs of those attending the training.

Those responsible for clinical governance should ensure that staff training is included in regular audit of the immunisation service

1 The aims of immunisation: national policy and schedules

Learning outcome

To be able to explain the aims of immunisation, describe national policy and schedules and deal with variations to the schedule

Learning objectives

At the end of this session, vaccinators will be able to:

- Explain the different factors that inform vaccine policy decisions
- Access current vaccine policy both in the Green Book and the Chief Medical Officer's Letters and Updates
- Describe the current UK vaccine schedule
- Describe how immunisation programmes are monitored through the use of surveillance and the COVER programme
- Design appropriate schedules for individuals with unknown or uncertain immunisation status

Session content should include:

- History of immunisation
- Concepts of control, elimination and eradication of vaccine preventable diseases
- The role of surveillance in designing and monitoring immunisation programmes
- How the number, timing and spacing of doses is decided upon
- The construction of the National Immunisation schedule
- Role of the JCVI and how vaccine policy is decided upon
- Current published policy e.g. Green Book, CMO publications and letters
- Designing schedules for people with uncertain or incomplete vaccination status with the minimum number of visits
- The role of different agencies and personnel in immunisation
- Resources available locally and nationally to consult about immunisation issues

References

1. Department of Health *Immunisation Against Infectious Disease*. (The Green Book). Available online at http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/GreenBook/fs/en

2. Department of Health website. http://www.dh.gov.uk/
   Vaccination-relevant sections of this site include:
   - Chief Medical Officer pages
     http://www.dh.gov.uk/AboutUs/MinistersAndDepartmentLeaders/ChiefMedicalOfficer/fs/en
   - Joint Committee on Vaccination and Immunisation (JCVI)
     http://www.advisorybodies.doh.gov.uk/jcvi/

3. Health Protection Agency website. http://www.hpa.org.uk
   - "Vaccination of individuals with uncertain or incomplete immunisations" algorithm
   - COVER programme
     http://www.hpa.org.uk/infections/topics_az/vaccination/vac_coverage.htm
   - Vaccination guidelines page
     http://www.hpa.org.uk/infections/topics_az/vaccination/vac_guidelines.htm

4. World Health Organisation (WHO) website. http://www.who.int/en/
   - Country by Country immunisation coverage, incidence of vaccine-preventable diseases and the immunisation schedules for most of the countries in the world.
     http://www-nt.who.int/vaccines/globalsummary/Immunization/CountryProfileSelect.cfm

5. Begg N, Cutts T. The role of epidemiology in the development of a vaccination programme. Chapter 6 in: Cutts F, Smith P (eds). *Vaccination and World Health*. Chichester: Wiley, 1994. p123–44

6. Begg N, Miller E. Role of epidemiology in vaccine policy. *Vaccine* 1990;**8**:180-89

7. Begg N, Gill O, White J. COVER (Cover of Vaccination Evaluated Rapidly): Description of the England and Wales Scheme. *Public Health* 1989;**103**:81-89

2 The immune system and how vaccines work

Learning outcome

To be able to describe in outline the immune system and how vaccines work in individuals and in populations

Learning objectives

At the end of this session, vaccinators will be able to:

- Explain the difference between innate, passive and active immunity
- Describe the basic immune response to a vaccine
- Describe herd immunity and explain why it is important
- List conditions that affect the immune response to vaccines

Session content should include:

- 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

References

1. Department of Health *Immunisation Against Infectious Disease*. (The Green Book). Available online at http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/GreenBook/fs/en

2. Plotkin S. Vaccines, Vaccination, and Vaccinology. *Journal of Infectious Diseases* 2003;187: 1349-59

3. National Institute of Health and Human Disease. *Understanding the Immune System. How it works*. U.S. Department of Health and Human Sciences National Institute of Health. September 2003. Available at: http://www.niaid.nih.gov/publications/immune/the_immune_system.pdf

4. Royal College of Paediatrics and Child Health *Immunisation of the immunocompromised child. Best Practice Statement* London: RCPCH, 2002 Available at http://www.rcpch.ac.uk/

5. Kassianos G. *Immunization childhood and travel health*. Oxford: Blackwell Science Ltd. 2001 (Fourth ed)

6. Ada G, Isaacs D *Vaccination* 2000 Allen and Unwin, St Leonards, NSW

3 Vaccine preventable diseases

Learning outcome

To describe and recognise the main features of vaccine preventable diseases and the nature and frequency of their acute and long term complications

Learning objectives

At the end of this session, vaccinators will be able to:

- Describe the main signs and symptoms, mode of transmission and period of infectivity of each different vaccine preventable disease 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 acute and potential long term complications of the vaccine preventable diseases and describe their frequency
- Know where to find further information about each disease

Session content should include:

- Epidemiology, signs and symptoms and mode of transmission of each disease
- Potential complications/long-term sequelae; their nature and rates of each

References

1. Department of Health *Immunisation Against Infectious Disease.* (The Green Book). Available online at http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/GreenBook/fs/en
2. Surveillance data and disease specific information on Health Protection Agency website http://www.hpa.org.uk/
3. Immunisation Information website http://www.immunisation.org.uk/
4. Detailed information about vaccine-preventable diseases on World Health Organization website http://www.who.int/health_topics/en/
5. U.S. Centers for Disease Control and Prevention website http://www.cdc.gov/
6. Meningitis Research Foundation. *Vital signs, Vital issues: Recognition and prevention of meningitis and septicaemia. Help for community practitioners.* 2005
7. Plotkin S, Orenstein W. (Eds) *Vaccines* (4th Edition) Philadelphia: WB Saunders and Company, 2004
8. Davies E, Elliman D, Hart C, Modi N and Rudd P. *Manual of Childhood Infections* 2nd edition. Royal College of Paediatrics and Child Health. WB Saunders, 2001

4 The different types of vaccines used and their composition

Learning outcome

To have knowledge and understanding of the vaccines used in the national immunisation programme

Learning objectives

At the end of this session, vaccinators will be able to:

- Identify the type (immunoglobulin, live, inactivated, polysaccharide, conjugate) of vaccine used to prevent each disease
- State when immunoglobulin is indicated
- Describe how vaccine trials are carried out before a vaccine is released and how safety and efficacy are monitored after their release
- State the contraindications for each type of vaccine
- Describe the nature and frequency of adverse events and compare these with the complications of the diseases

Session content should include:

- Immunoglobulins, live and inactivated vaccines, polysaccharide and conjugate vaccines and combination vaccines
- Composition of a vaccine, use of adjuvants and other additives
- Stages of vaccine trials before and after licensure
- Efficacy, reactogenicity, compatibility
- Contraindications and adverse events for each vaccine

References

1. Department of Health *Immunisation Against Infectious Disease*. (The Green Book).
   Available online at
   http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/GreenBook/fs/en

2. Royal College of Paediatrics and Child Health *Immunisation of the Immunocompromised child. Best Practice Statement* London: RCPCH, 2002
   Available at http://www.rcpch.ac.uk/

3. Immunisation Information *Thiomersal and Vaccines* fact sheet July 2003
   http://80.168.38.66/files/thiomersalfsht.pdf

4. Royal College of Paediatrics and Child Health & Neonatal and Paediatric Pharmacists Group. *Medicines for Children*. RCPCH Publications, 2003

5. Offit P, Addressing parents' concerns: do vaccines contain harmful preservatives, adjuvants, additives, or residuals? Pediatrics. 2003 Dec;112(6):1394-7

6. National Institute of Health and Human Disease. *Understanding Vaccines. What they are and how they work*. U.S. Department of Health and Human Sciences National Institute of Health. July 2003
   Available at: http://www.niaid.nih.gov/publications/vaccine/pdf/undvacc.pdf

5 Current issues and controversies regarding immunisation

Learning outcome

To know about current issues and controversies regarding immunisation

Learning objectives

At the end of this session, vaccinators will be able to:

- Describe the myths and facts relating to current controversies (e.g. MMR, thiomersal), and list key points for responding to parents' fears
- Identify reliable information on new issues (Green Book, Dept.Health, Immunisation Information NHS, Health Protection Agency, WHO)
- Critically evaluate vaccine research, allegations and media reporting of vaccine issues

Session content should include:

- Importance of keeping updated
- How and where to find information (local and national sources of advice) and assessing the reliability of sources
- Media portrayal of vaccine news stories

References

1. Immunisation Information NHS website www.immunisation.nhs.uk
   The Immunisation Team at the Department of Health publishes detailed specific factual information in response to current issues and controversies as they arise e.g.Thiomersal fact sheet.

2. www.mmrthefacts.nhs.uk is a website produced by the same Dept Health team providing news, information, resources and scientific evidence concerning the MMR vaccination specifically.

3. Health Protection Agency website www.hpa.org.uk
   The Health Protection Agency often publishes a response to current news stories and recently published research.

4. Offit P, Jew R Addressing parents' concerns: do vaccines contain harmful preservatives, adjuvants, additives or residuals? *Pediatrics* 2003 Dec:112(6Pt 1):1394-7

5. Miller E, Andrews N, Waight P and Taylor B Bacterial infections, immune overload, and MMR vaccine. *Arch Dis Child* 2003;**88**:222

6. Offit P, Quarles J, Gerber M *et al.* Addressing parents' concerns: do multiple vaccines overwhelm or weaken the infant's immune system? *Pediatrics* 2002;**109**:124–9

7. Halsey N Combination vaccines: defining and addressing current safety concerns. *Clin Infect Dis* 2001 Dec 15; 33 Suppl 4: S312-8. Review

8. MacIntyre C, Fielding H. *Immunisation Myths and Realities: Responding to arguments against immunisation*. 3rd edition. Commonwealth of Australia, 2000.
   Available at http://immunise.health.gov.au/myths_2.pdf

6 Communicating with patients and parents

Learning outcome

To communicate effectively with patients and parents about vaccination

Learning objectives

At the end of this session, vaccinators will be able to:

- Direct others, including parents, to reliable sources of information both locally and nationally
- List the factors influencing parents/caregivers decision-making
- Communicate key facts in response to lay questions and correct misconceptions about vaccines
- Identify local and national sources of further information for patients and parents
- Provide parents with language-appropriate vaccine information leaflets at a timely interval prior to vaccination and will be familiar with the content of the leaflets themselves
- Effectively communicate about risks associated with vaccination
- Demonstrate acknowledgment of the anxiety of individuals such as parents and respect for differing views through listening to their concerns
- Demonstrate commitment to offering the best professional advice on vaccination

Session content should include:

- Issues that affect and influence parents/caregivers in their vaccination decision making
- Responding to commonly asked questions and misconceptions
- Provision of suitable vaccine educational material
- Local and national sources of further information and advice for parents
- Risk communication
- The effect of media reporting on parental views and acceptance of vaccination

References

1. Immunisation Information NHS www.immunisation.nhs.uk
   The Immunisation Team at the Department of Health produces factsheets and information packs for parents and health professionals which can be downloaded via the website.

2. Comprehensive MMR information packs can be downloaded or ordered from
   www.mmrthefacts.nhs.uk

3. Series of papers about risk communication in Education and Debate section *BMJ* 2003 Sept 27;**327**:725-740.
   (1) Bellaby P. Communication and miscommunication of risk: understanding UK parents' attitudes to combined MMR vaccination. *BMJ* 2003 Sept 27;**327**:725-728
   (2) Alaszewski A, Horlick-Jones T, How can doctors communicate information about risk more effectively? *BMJ* 2003 Sept 27;327:728-731
   (3) Mazur D. Influences of the law on risk and informed consent. *BMJ* 2003 Sept 27;**327**:731-736
   (4) O'Connor A, Légaré F, Stacey D Risk communication in practice: the contribution of decision aids BMJ 2003 Sept 27;327:736 - 740

4. Ball L, Evans G, Bostrom A. Risky Business: Challenges in Vaccine Risk Communication. *Pediatrics* 1998;101(3):453-458

7 Legal aspects of vaccination

Learning outcome

To understand the legal aspects of vaccination

Learning objectives

At the end of this session, vaccinators will be able to:

- Say why consent is requested, whether it is required and in what form
- Describe the legal basis for requiring data protection
- Describe the reasons for requiring good documentation and communication of information on vaccination
- Define the role and the limitations of patient group directions
- Define nurse prescribing issues
- Describe the clinical governance issues which relate to immunisation

Session content should include:

- Current legal requirements for consent, including 'Fraser competence'
- Data protection (Data Protection Act, Caldicott)
- Documentation
- Professional accountability
- Patient Group Directions
- Nurse prescribing

References

1. Department of Health *Immunisation Against Infectious Disease*. (The Green Book). Available online at http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/GreenBook/fs/en

2. Department of Health *Good practice in consent implementation guide: consent to examination or treatment*. March 2001 http://www.doh.gov.uk/consent/guidance.htm

3. Nursing & Midwifery Council website http://www.nmc-uk.org

   For publications and further information about:

   - consent: http://www.nmc-uk.org/nmc/main/advice/consent.html
   - professional accountability: NMC *Code of Professional Conduct: standards for conduct, performance and ethics* June 2004 http://www.nmc-uk.org/nmc/main/publications/codeOfProfessionalConduct.pdf
   - administration of medicines: *Guidelines for the administration of medicines*. August 2004 http://www.nmc-uk.org/nmc/main/publications/Guidelinesformedicines.pdf
   - records and record-keeping: *Guidelines for records and record-keeping*. August 2004 http://www.nmc-uk.org/nmc/main/publications/Guidelinesforrecords.pdf

4. Department of Health Nurse Prescribing information http://www.dh.gov.uk/PolicyAndGuidance/MedicinesPharmacyAndIndustry/Prescriptions/NursingPrescribing/fs/en

5. Department of Health. Health Service Circular 2000/026 Patient Group Directions 9 August 2000. NHS Executive

8 Storage and handling of vaccine

Learning outcome

To follow correct procedures for storage and handling of vaccines

Learning objectives

At the end of this session, vaccinators will be able to:

- Describe the cold chain and the importance of its maintenance
- Specify minimum/maximum temperatures for vaccine storage
- Describe the effects of temperature on potency and efficacy of vaccine
- Describe the requirements for the correct ordering, delivery and storage of vaccines within the workplace
- Identify vaccines sensitive to light, heat and freezing
- Know the procedures to follow when vaccines are not delivered or stored within the recommended temperature range
- Know how to manage breakdowns in the cold chain, where to dispose of damaged vaccine, who to inform and what action to take
- Explain how to audit current management of cold chain within their practice area

Session content should include:

- Effects of temperature on potency, efficacy and adverse events of vaccines
- Daily monitoring and written temperature records
- Correct use of designated purpose-built vaccine fridge
- Importance of regular checks for expired vaccine
- Ordering appropriate vaccine stock
- Management of breakdowns in the cold chain
- 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
- Taking responsibility for ensuring that all vaccines administered have been stored correctly
- Writing protocols/Standard Operating Procedures
- Fulfilment of PGD storage requirements

References

1. Department of Health *Immunisation against Infectious Disease.* (The Green Book)
   Available online at
   http://www.dh.gov.uk/P

2. Nayda C, Kempe A, Miller N. *Keep it Cool: the Vaccine Cold Chain. Guidelines for Immunisation Providers on Maintaining the Cold Chain.* Second edition. Commonwealth of Australia 2001
   Available at
   http://immunise.health.gov.au/cool.pdf

3. Galazka A., Milstein J., Zaffran M. *Thermostability of vaccines.* Global Programme for Vaccines and Immunisation World Health Organisation Geneva 1998
   Available at
   http://www.who.int/vaccines-documents/DocsPDF/www9661.pdf

9 Correct administration of vaccines

Learning outcome

To reconstitute and administer vaccines correctly

Learning objectives

At the end of this session, vaccinators will be able to:

- Identify the correct dose and site of administration of all vaccines for each age group
- List true contraindications for all vaccines and describe common false contraindications for vaccines
- Position patients of different ages for safe and effective vaccination
- Reconstitute vaccines correctly
- Explain how to prepare and dispose of vaccination equipment

Session content should include:

- Assessment of fitness for vaccination and identification of true contraindications to vaccination
- Route, needle size and injection site for administration of vaccine based on research, current recommendations and effects on efficacy and local reactions
- Dosage and reconstitution of each vaccine
- Preparation and disposal of vaccination equipment

References

1. Department of Health *Immunisation Against Infectious Disease.* (The Green Book) Available online at http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/GreenBook/fs/en

2. Royal College of Paediatrics and Child Health (RCPCH) *Position Statement on Injection Technique* March 2002 http://www.rcpch.ac.uk/publications/recent_publications/Injections1.pdf

3. Diggle, L, Deeks J. Effect of needle length on the incidence of local reactions to routine immunisation in infants aged 4 months: randomised control trial. *BMJ* 2000;321:931-3

10 Anaphylaxis and other adverse events

Learning outcome

To be able to manage anaphylaxis and other adverse events correctly

Learning objectives

At the end of this session, vaccinators will be able to:

- Report the incidence of local and systemic adverse events and anaphylaxis
- Distinguish between anaphylaxis and fainting
- Manage anaphylaxis
- Prepare and check the equipment and drugs required for managing anaphylaxis
- Define and recognise an adverse event
- Report an adverse event

Session content should include:

- Physiology of anaphylaxis and allergic reactions
- Potential causes of anaphylaxis and ways of decreasing the risks
- Signs and symptoms of and differences between anaphylaxis and fainting
- Treatment of anaphylaxis, equipment required, adrenaline dosages and sites for its administration
- Definition and types of adverse events
- Where and how to report adverse events to vaccines
- Recording of adverse events to vaccinations
- Use of Yellow Card reporting system

References

1. Department of Health *Immunisation Against Infectious Disease*. (The Green Book)
   Available online at
   http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/GreenBook/fs/en

2. Resuscitation Council website
   www.resus.org.uk

3. Medicines and Healthcare products Regulatory Agency (MHRA) website
   http://medicines.mhra.gov.uk/
   for information about the Yellow Card Scheme

11 Documentation, record keeping and reporting

Learning outcome

To correctly document vaccinations given in all relevant records and communicate information to appropriate authorities

Learning objectives

At the end of this session, vaccinators will be able to:

- Document a vaccination correctly (type of vaccine, batch number, expiry date, date given and injection site) in all relevant records (personal child health record, medical record, child health system)
- Explain the importance and purposes of recording information about vaccinations in each system
- Describe the role and importance of vaccination coverage data
- Describe the role of the Child Health System in record-keeping, calling and re-calling for immunisation
- Report serious untoward events

Session content should include:

- Requirements and importance of accurate documentation
- Where and why vaccinations should be recorded and reported
- Liaison with the Child Health Computer system administrators
- Policy for reporting and recording vaccine errors
- Importance of and reasons for recording batch numbers

References

1. Nursing and Midwifery Council *Guidelines for records and record keeping*. London: NMC, August 2004. Available at http://www.nmc-uk.org/nmc/main/publications/Guidelinesforrecords.pdf

2. Begg N, Gill O, White J. COVER (Cover of Vaccination Evaluated Rapidly): Description of the England and Wales Scheme. *Public Health* 1989;**103**:81-89

12 Strategies for improving immunisation rates

Learning outcome

To be able to identify and implement strategies for improving immunisation rates

Learning objectives

At the end of this session, vaccinators will be able to:

- Explain the importance of good organisation of clinics, appointment systems etc, to enable good uptake of vaccination
- Describe the need for facilitating vaccination through opportunistic vaccination, vaccination at home, clinics organised out of working hours for working parents.
- Facilitate other health care professionals in promoting vaccination through providing support & information to reassure parents.

Session content should include:

- 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 such as the clinic environment, appointment timings and length and attitudes of staff to vaccination
- The critical importance of professional confidence in vaccination

References

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3. Nicoll A, Elliman D, Begg N. Immunisation: causes of failure and strategies and tactics for success: strong professional commitment is the key. *British Medical Journal* 1989;**299**:351-359

4. Bedford H. The importance of professional advice in achieving high immunisation uptake. *Health Visitor* 1988;**61**:286-87

APPENDIX

Suggested minimum clinical competencies

COMPETENCY	DATES OF ASSESSMENT (minimum 2 assessments per competency)	SIGNATURE OF ASSESSOR that competency achieved
1. Demonstrates understanding of importance of maintaining cold chain: - can state correct temperature range for vaccine storage - records vaccine fridge temperature at start of each vaccination session		
2. Checks patient's records prior to vaccination to ascertain previous immunisation history and which vaccines are required to bring patient up to date with national schedule		
3. Knows whom to contact for advice if unsure about which vaccination to give/vaccine schedule/spacing or compatibility of vaccines		
4. Gives appropriate advice and information to parents		
5. Ensures informed consent has been obtained prior to vaccinating		
6. Correctly reconstitutes vaccines and is aware of which vaccines can be mixed together		
7. Ensures anaphylaxis equipment is readily available, knows what should be provided and how and when to use it		
8. Checks correct vaccine and vaccine dose has been prepared prior to administration		
9. Provides reassurance to vaccinee (and parent) and correctly positions patient prior to vaccinating		
10. Demonstrates correct injection technique, uses recommended needle size and recommended vaccination site(s)		
11. Disposes of sharps, vaccine vials and other vaccine equipment safely		
12. Documents type of vaccine, batch number, expiry date, date given and injection site in personal child health record and clinic notes and reports to Child Health System		
13. Gives advice to patient about potential side effects and management of these		

I agree that I am competent in all aspects of immunisation:

Signed

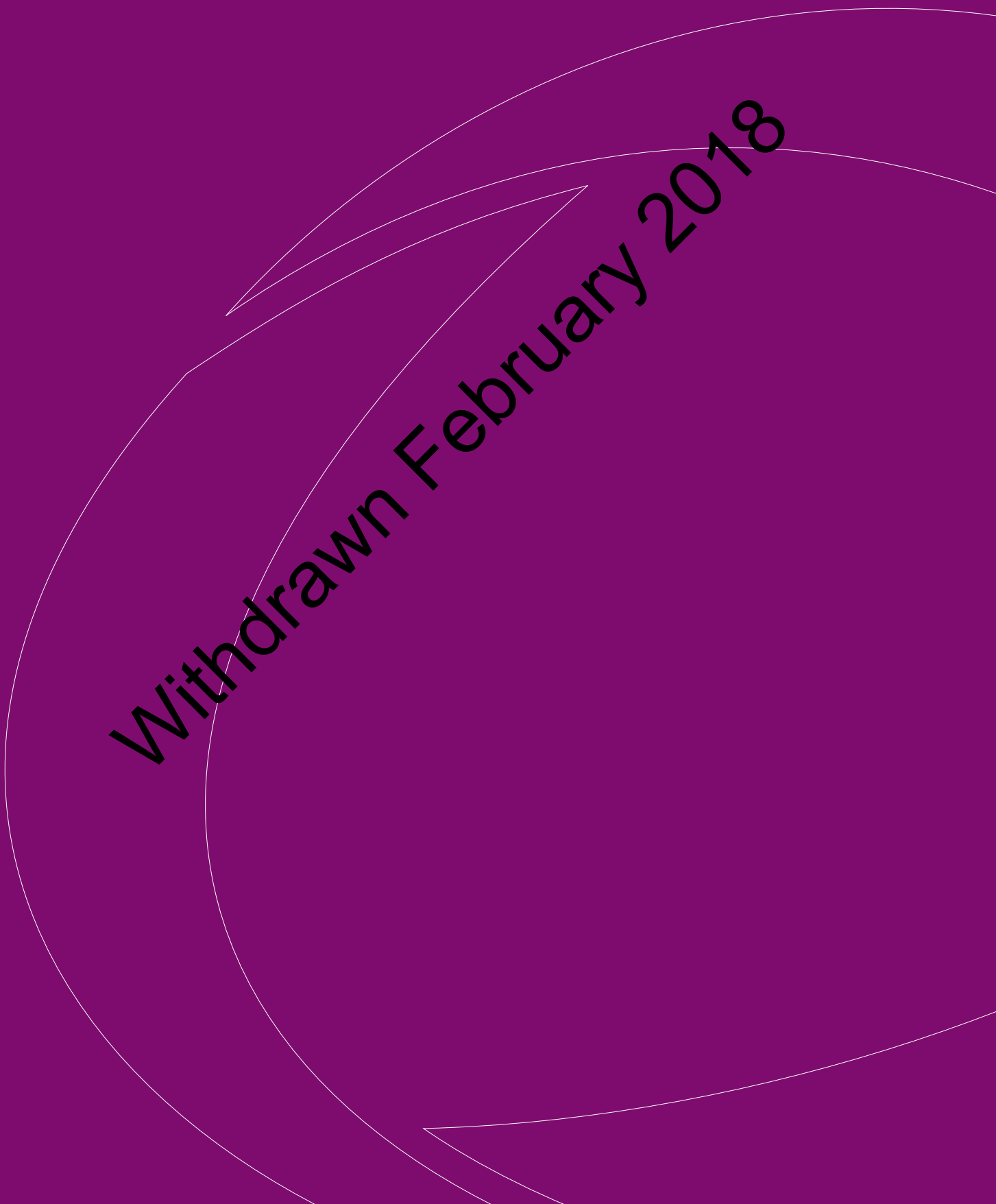
Date

I agree that

is competent in all aspects of immunisation

Signed Date

Title, qualifications and relationship to trainee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