Guidelines for
VACCINATIONS
in General Practice
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Executive Summary

A multidisciplinary committee was established by the Health Service Executive (HSE) to develop guidelines for best practice for immunisations carried out in general practice on behalf of the HSE.

The vaccinations administered in general practice on behalf of the HSE are part of a national strategy to protect children and adults from infectious diseases through vaccination and include:

- Primary Childhood Immunisation Programme
- Schools Immunisation Programme
- Seasonal influenza and pneumococcal polysaccharide vaccination campaigns
- Vaccination of late entrant/defaulters from vaccination programmes
- Vaccinations carried out for public health and occupational health purposes

In order to provide childhood vaccination a General Practitioner (GP) must hold a current contract under the Primary Childhood Immunisation Programme.

Staff should ensure that they have training in Basic Life Support and Anaphylaxis and that retraining is provided in accordance with best practice i.e. every 2 years. They should be familiar with the following documents:

- Immunisation Guidelines for Ireland
- Immunisation training slides for Health Professionals, National Immunisation Office 2011
- Summary of Product Characteristics (SmPCs) for each of the vaccines available at
  www.imb.ie or www.medicines.ie

Immunisation should be promoted at every opportunity with the provision of appropriate information regarding the vaccines to be administered including the risk of vaccinating and not vaccinating.

Standard procedures should be followed for all immunisations. This includes having:

- a medication protocol for the administration of vaccines. In the absence of a medication protocol an individual prescription for vaccination should exist
- availability of appropriate drugs and equipment for resuscitation
- vaccine administration at the correct time, and in the correct site, interval and dose
- timely ordering, storage and recorded maintenance of the cold chain for all vaccines

The only contraindication to all vaccines is a confirmed anaphylactic reaction to the vaccine or to a constituent or a constituent of the syringe, syringe cap or vial (e.g. Latex anaphylaxis). Live vaccines (e.g. MMR and varicella) are contraindicated in pregnancy, for those with immunosuppression, and on steroid or immunomodulator therapy.

When there are queries about giving a vaccine, the Assistant Directors of Public Health Nursing with responsibility for immunisation or a Specialist in Public Health Medicine in the local Department of Public Health should be contacted for further advice.
1. Purpose

The purpose of this document is to provide guidance for best practice for vaccinations carried out in general practice on behalf of the Health Service Executive (HSE).

A committee was established in early 2012 to develop these guidelines which aim to inform relevant staff in general practice and the HSE about procedures to be followed for vaccinations carried out in general practice.

Members of the committee
Dr Brenda Corcoran, National Immunisation Office (Chairperson)
Ms Siobhan Jordan/Ms Roisin Doogue (reviewer), Irish Practice Nurses Association
Ms Frances Heaney, Child Health
Ms Shirley Kane, Primary Care Unit
Ms Ann McGill, Professional Development Coordinator for Practice Nurses
Ms Ger McGoldrick/Ms Marianne Healy, Director of Public Health Nursing
Dr Mary O’Meara, National Immunisation Office (until April 2012)
Ms Mary O’Rourke, HSE Contracts Office
Dr Conor O’Shea, Irish College of General Practitioners
Ms Lesley Smith, National Immunisation Office
Ms Jane Ward, Assistant Director of Public Health Nursing with responsibility for immunisation

The guidelines should be read in conjunction with the guidance issued by the National Immunisation Advisory Committee (NIAC) of the Royal College of Physicians of Ireland (RCPI) and contained in the Immunisation Guidelines for Ireland http://www.immunisation.ie/en/HealthcareProfessionals/ImmunisationGuidelines

2. Scope of the Guidelines

These clinical and administrative guidelines apply to all general practice staff (general practitioners GPs, practice nurses and administrators) involved in vaccinations on behalf of the HSE and HSE staff (medical officers, nurses and administrators) supporting the vaccinations administered in general practice.

The vaccinations administered in general practice on behalf of the HSE are part of a national strategy to protect children and adults from infectious diseases through vaccination and include

- Primary Childhood Immunisation Programme
- Schools Immunisation Programme
- Seasonal influenza and pneumococcal polysaccharide vaccination campaigns
- Vaccination of late entrants/defaulters from vaccination programmes
- Vaccinations carried out for public health and occupational health purposes

In order to provide childhood vaccination a GP must hold a current contract under the Primary Childhood Immunisation Programme.
Staff should ensure that they have training in Basic Life Support and Anaphylaxis and that retraining is provided in accordance with best practice i.e. every 2 years.

They should be familiar with the following documents:
- Immunisation Guidelines for Ireland
- Immunisation training slides for Health Professionals, National Immunisation Office 2011
- Summary of Product Characteristics (SmPCs) for each of the vaccines available at
  www.imb.ie or www.medicines.ie

3. Immunisation Schedules

3.1 Introduction

The National Immunisation Advisory Committee (NIAC) is an independent committee of the Royal College of Physicians of Ireland comprising of experts in a number of specialties including infectious diseases, paediatrics, public health, microbiology, occupational health, general practice and nursing.

NIAC recommendations are based on the epidemiology of the relevant vaccine preventable disease in Ireland, as determined by the Health Protection Surveillance Centre (HPSC), and international best practice in relation to immunisation. NIAC makes recommendations to the Department of Health (DoH) on immunisation policy in Ireland and the HSE is responsible for the implementation of such policy.

NIAC guidance is regularly updated and it is essential that all staff involved in vaccination check the updated chapters at

All staff should promote and support the recommended child and adult immunisation schedules for Ireland.

3.2 Primary Childhood Immunisation Programme

The birth cohort in Ireland is approximately 75,000 births per year. The World Health Organization (WHO) has set a target uptake of 95% for primary immunisations to prevent outbreaks of vaccine preventable diseases.

As outlined in quarterly statistics produced by the Health Protection Surveillance Centre (HPSC), uptake rates for Ireland have improved and are approaching the WHO target.

- Diphtheria, tetanus and pertussis (DTP) vaccine uptake at 24 months has increased from 90% in 2005 to 95% in 2012
- Measles, mumps and rubella (MMR) vaccine uptake at 24 months has increased from 84% in 2005 to 92% in 2012
The latest HPSC statistics are available at http://www.hpsc.ie/hpsc/A-Z/VaccinePreventable/Vaccination/ImmunisationUptakeStatistics/

The primary childhood immunisation programme (PCIP) comprises
- BCG vaccination (given by HSE doctors in maternity hospitals or HSE clinics)
- Vaccinations delivered in general practice in the first years of life

The current (2013) PCIP is outlined in Appendix A.

3.3 Schools Immunisation Programme
The school immunisation programme comprises vaccinations given in the first year of primary school and the first year of second level school. The current (2013) school immunisation programme is outlined in Appendix A.


These vaccinations are mainly administered by HSE staff (Medical Officers and Nurses). In a small number of areas these vaccinations are administered in general practice.

Vaccine uptake of 4 in 1 was 86% and MMR was 84% in 2011/2012 http://ndsc.newsweaver.ie/epiinsight/1s4r7v3qv7n?a=1&p=30773765&t=17517774

3.4 Seasonal influenza and pneumococcal polysaccharide campaigns
The HSE provides seasonal influenza vaccine for those aged 65 and over (~550,000), those in medically at risk groups, pregnant women, health care workers and carers.

The World Health Organization has set a target uptake of 75% for influenza vaccination for those aged 65 and older.

Analysis of returns from GPs for those aged 65 years and older over (who have a medical or doctor only card) shows that the WHO target has not yet been achieved

- Vaccine uptake increased from 63% in 2005/2006 to 64 % in 2010/2011 http://ndsc.newsweaver.ie/epiinsight/193kybwidaq?a=1&p=22873245&t=17517774

The majority of seasonal influenza vaccine is given in general practice - since 2011/2012 people aged 65 and older and since 2012/2013 those 18 and older in an at risk group have had a choice to attend either their GP or pharmacist.

Pneumococcal polysaccharide vaccine (PPV23) is delivered in general practice settings for those at increased risk of pneumococcal disease as per the recommendations in the Pneumococcal chapter of the Immunisation Guidelines at http://www.immunisation.ie/en/HealthcareProfessionals/ImmunisationGuidelines

Most people only require one dose of PPV23.

3.5 Vaccination of late entrants/defaulters from vaccination programme
Where individuals are identified as having had no previous immunisations or an incomplete primary course arrangements should be made to ensure appropriate vaccination in line with the guidance for “late entrants” in the Immunisation Guidelines for Ireland available at http://www.immunisation.ie/en/HealthcareProfessionals/Guidelinesforlateentrants/
Information on the vaccine schedules in different countries is available at http://www.euvac.net/graphics/euvac/vaccination/vaccination.html and http://apps.who.int/immunization_monitoring/en/globalsummary/scheduleselect.cfm

Vaccination of women who are non-immune to rubella is recommended as outlined in the Rubella chapter of the Immunisation Guidelines at http://www.immunisation.ie/en/HealthcareProfessionals/ImmunisationGuidelines

3.6 Vaccinations carried out for public health and occupational health purposes
General practice personnel also provide vaccinations for public health purposes. In the event of an outbreak e.g. measles, general practice staff in collaboration with Departments of Public Health provide vaccinations for contacts of cases.

Some people may require additional doses of vaccines to protect them from diseases to which they might be susceptible e.g. people with asplenia require additional vaccines to protect them from Haemophilus influenza, pneumococcal and meningococcal disease. For more details see the Immunisation of the Immunocompromised chapter of the Immunisation Guidelines at http://www.immunisation.ie/en/HealthcareProfessionals/ImmunisationGuidelines

General practice also provides vaccinations for occupational health e.g. provision of hepatitis B vaccine for healthcare workers.

4. Carrying out Vaccination in General Practice

4.1 Introduction
This section outlines the roles and responsibilities that need to be carried out by general practice staff to ensure the safe and effective delivery of the immunisation programme. Roles and responsibilities may be assigned on a local basis according to the professional qualifications and expertise of staff.

There are key tasks important to the efficient running of an immunisation programme, which are assigned to a “designated person” to ensure that all members staff know who is responsible for that key task. The person designated to a particular task may change or rotate depending on local arrangements.

All staff should be familiar with the following documents:

A. Immunisation Guidelines for Ireland


C. Immunisation training slides for Health Professionals, National Immunisation Office 2011

D. Summary of Product Characteristics (SmPCs) for each of the vaccines available at www.imb.ie or www.medicines.ie
4.2 Setting up and training
In order to provide childhood vaccination a GP must hold a current contract under the Primary Childhood Immunisation Programme. New applications should be made to the Local Health Office.

Once the contract is in place the GP should make contact with the HSE National Cold Chain Service, complete a set up form and will then receive a vaccine delivery schedule.

Changes in practice addresses, additional practices or movement between practices must be notified in writing to the HSE.

National training in immunisation is offered by the Professional Development Coordinators for Practice Nurses and facilitated by the National Immunisation Office in cooperation with the local Departments of Public Health. Training materials are available at www.immunisation.ie

Staff should ensure that they have training in Basic Life Support and Anaphylaxis and that retraining is provided in accordance with best practice i.e. every 2 years. Contact the local Professional Development Coordinators for Practice Nurses or the Centre for Nurse Education for more information.


The GP should ensure that all general practice staff involved in the provision of vaccination in general practice are aware of all relevant guidelines and should facilitate any training required.

4.3 General Practitioner role
The role of the GP is to

A. Avail of every opportunity (including the post natal check/ 6 week visit) to promote vaccination.

B. Have a medication protocol within the practice for the administration of vaccines. In the absence of a medication protocol (see Section 4.4) an individual prescription for vaccination should exist.

C. Carry out an individual medical assessment for clients if requested by practice nurse working under a medication protocol (see Section 4.4).

D. Answer queries from parents/legal guardians/clients being vaccinated and other members of the general practice team.

E. Be present in the building while vaccines are being given by nurse vaccinators and for 15 minutes after the last vaccine is administered to deal with anaphylaxis or any other adverse events, including syncope that might occur.

F. Take queries from parents/legal guardians/clients being vaccinated about possible adverse reactions that occur after the client has left the general practice venue.
G. Ensure that adverse events are notified to the Irish Medicines Board (IMB) (see Section 6.0).

See Appendix B for GP practice administration issues.

4.4 Administration of vaccines under individual prescription or Medication Protocol
An Bord Altranais defines medication protocols as “written directions that allow for the supply and administration of a named medicinal product by a registered nurse or midwife in identified clinical situations”. A medication protocol involves the authorisation of the nurse/ midwife to supply and administer a medication to groups of patients in an defined situation meeting specific criteria and who may not be individually identified before presentation for treatment”.

A. Vaccines given in primary care are prescribed individually by a GP or administered under medication protocols agreed at practice level. An individually named prescription is not required for the supply and administration of medication when a medication protocol is in effect.

B. Practice nurses working under medication protocols will be accountable for their own clinical practice and should be familiar with and adherent to the practices as set out in these guidelines.

C. All clients meeting the exclusion criteria of a medication protocol must be referred to the GP for an individual medical assessment.

D. Arrangements should be in place in each practice for the audit of Medication Protocol usage.

See Appendix C for a sample medication protocol which can be adapted by an individual general practice.

4.5 Vaccinator role and responsibilities (GPs and Practice nurses)
Each vaccinator is accountable for his/her own clinical practice and ensures that they are familiar with and adhere to the practices as set out in these guidelines (see Self Assessment of Competency Tool in Appendix D). They should also be available to answer queries from parents/legal guardians/clients being immunised and other members of the general practice team.

They should also check that
A. All the equipment necessary for the administration of the vaccines is in compliance with best practice.

B. Appropriate drugs and equipment are available for resuscitation.

C. All documentation is available.

The roles and responsibilities of HSE staff are outlined in Appendix E and see Appendix F for the HSE Area Immunisation Unit Directory.
5 Procedures

5.1 Before vaccine administration

Prior to vaccination the vaccinator

**A.** Ensures that a GP is present in the building while vaccinations are being given and for 15 minutes after the last vaccine is administered to deal with anaphylaxis or any other adverse events, including syncope that might occur.

**B.** Checks and records client information accurately including permission to use mobile numbers for text alerts (see Appendix B).

**C.** Confirms client’s identity (Name, address, date of birth and mother or father’s name as appropriate. For younger children it will be necessary to confirm identity with parent/legal guardian).

**D.** Provides appropriate information regarding the vaccines to be administered including the risk of vaccinating and not vaccinating.

**E.** Obtains written informed consent (see Section 5.2).

**F.** Assesses the client’s suitability for immunisation on the day. Vaccines should only be given to clients who are well on the day and for whom no contraindication is identified as per the Immunisation Guidelines of Ireland.

**G.** Routine physical examinations and procedures (e.g. measuring temperatures) are NOT recommended for vaccinating persons who appear to be healthy. The client or parent should be asked if they or their child is ill.

**H.** Defers any clients with an acute febrile illness on the day and reschedules vaccination.

**I.** Ensures that when vaccines are being given according to a particular schedule e.g. PCIP that the interval from last vaccines given is appropriate. If not, vaccination should be deferred and the client rescheduled.

**J.** Checks that the intervals between different vaccines are appropriate.

**K.** Checks that the vaccine has been prescribed by the GP or that the vaccine can be administered under medication protocol (see Section 4.4).

**L.** Checks that the appropriate vaccine(s) are in the vaccine refrigerator, are in date and stored in accordance with cold chain directions (see Section 8).

**M.** Removes vaccine from the vaccine refrigerator as required for vaccination.
N. Verifies with the parent/legal guardian/ client or other health professional that the expiry date has not passed and records this on the form.

O. Washes their hands or uses disinfectant gel before vaccine administration.

P. Reconstitutes vaccines in accordance with manufacturer’s instruction.

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Vaccine Reconstitution

Applies to some of the commonly used childhood vaccines

- 6 in 1
- Haemophilus influenza type B
- Meningococcal C
- MMR

Involves

- attaching the 21 gauge needle provided to the prefilled syringe containing diluent
- inserting the syringe into the vial
- mixing and then drawing the reconstituted vaccine back into the syringe
- changing the needle on the syringe ready for administration using an appropriate gauge needle as per Section 5.3

Q. Ensures that the vaccine colour and composition is in accordance with the Summary of Product Characteristics for that vaccine - if not discard the vaccine.

R. Ensures the client is correctly positioned for the safe administration of the vaccine(s) with help from a parent/legal guardian or other member of the general practice team.

S. Ensures that all vaccines are used within the recommended time frame.

MMR vaccines must be used within one hour of reconstitution or be discarded.

The Five Rights Of Vaccine Administration

1. The right patient
2. The right vaccine
3. The right dosage
4. The right route
5. The right time

5.2 Consent issues

Vaccination is not compulsory.

A. Informed consent must be obtained prior to vaccination. The person providing consent to a vaccination should be offered as much information as they reasonably need to make their decision.

The Guide to Professional Conduct & Ethics for Registered Medical Practitioners, 7th Edition, 2009 (Medical Council) states in Section 35.2 that “As part of the informed consent
process patients must receive sufficient information in a way that they can understand, to enable them to exercise their right to make informed decisions about their care. This refers to the disclosure of all significant risks or substantial risks of grave adverse consequences.”

B. The information materials produced by the National Immunisation Office (NIO) are written in clear concise language and have been approved by the National Adult Literacy Agency (NALA).

NALA states that according to international data about 1 in 4 Irish adults have literacy problems. Many adults therefore have difficulty understanding the technical details in the Patient Information Leaflet. This leaflet is provided by the vaccine manufacturer to comply with their licence with the Irish Medicines Board /European Medicines Agency.

Additional information can be accessed through websites including www.immunisation.ie www.imb.ie and www.medicines.ie

C. Under normal circumstances the parent(s) of a child can give consent for vaccination on their child’s behalf. For students aged under 16, consent must be obtained from a parent or legal guardian.

Under The Legal Guardianship of Infants Act, 1964, the mother is given automatic parental responsibility for the child. The father is also given parental responsibility if he is married to the mother at the time of the child’s birth or if they marry after the birth of the child or if both adults adopt the child together. However, if a child is born outside marriage the mother is given automatic responsibility for all decisions relating to the child. Under certain circumstances legal guardianship of the child may be changed e.g. if one parent dies the remaining parent will automatically assume sole legal guardianship of the child or another legal guardian can also be appointed by the court.

D. Those aged 16 years of age and over can consent on their own behalf.

E. Special consideration needs to be given to children who are in care of the HSE either on a voluntary or statutory basis and contact should be made with the appropriate social worker.

F. There is no maximum duration for consent. Consent remains valid for an indefinite period unless
   ▪ It is withdrawn
   ▪ There has been a change in the client’s capacity to give consent
   ▪ There has been a change to the proposed vaccine schedule to which the client has not given consent

Further guidance on consent, if required, is contained in “A Practical Guide to Immunisation” (Chapter six) which is available at http://www.immunisation.ie/en/HealthcareProfessionals/TrainingManual/
5.3 Vaccine administration

The vaccinator

A. Administers vaccine in accordance with NIAC guidelines with respect to the client’s age, site of vaccination and needle size outlined in the table below.

**NIAC recommendations regarding patients age, site of vaccination and needle size**

<table>
<thead>
<tr>
<th>Patients Age</th>
<th>Site</th>
<th>Needle size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth to 12 months*</td>
<td>Anterolateral aspect of middle or upper thigh</td>
<td>25 mm needle 23-25 gauge</td>
</tr>
<tr>
<td>12 to 36 months</td>
<td>Anterolateral aspect of middle or upper thigh until deltoid has developed adequate muscle mass</td>
<td>25 mm needle 23-25 gauge</td>
</tr>
<tr>
<td>From 3 years onwards**</td>
<td>Most dense portion of the deltoid muscle-between acromion and muscle insertion</td>
<td>25 mm needle 23-25 gauge</td>
</tr>
</tbody>
</table>

*Use a 16mm length needle in infants under 2.5-3kgs.  
**Use 38mm length needle on women>90kgs, men >118kgs.

B. Administers single dose of 0.5ml of the appropriate vaccine by intramuscular (IM) injection at a 90° angle to the skin at the appropriate site.

Where it is necessary to administer two vaccines in the same limb the vaccination sites should be separated by 2.5cms and the site and vaccine administered recorded accurately (see Section 7.1.B).

- The skin does not require cleaning before the vaccine is administered unless visibly dirty. In this instance the skin can be cleaned with soap and water. If an alcohol wipe is used the skin should be allowed to dry before the vaccine is injected.
- Gloves are not normally required when administering intramuscular injections. However, if the client’s skin or the vaccinator’s skin is not intact gloves should be worn.

5.4 After vaccine administration

After administering the vaccine(s) the vaccinator

A. Disposes of sharps immediately, without recapping the needle, into the sharps containers provided.

B. Washes their hands or uses disinfectant gel.

C. Completes the administration details including the vaccine name, manufacturer, batch number and expiry date, using peel off labels provided where appropriate at the end of the consent form immediately after the vaccine is given. For reconstituted vaccines the batch number recorded is the one on the box and on the peel off labels. (See Section 5.1.P).
D. Scans completed electronic forms into the client record.

E. Ensures the client’s vaccination record (immunisation passport for children) is completed and given to the parent/legal guardian/client before they leave the practice.

F. Ensures that each client remains in the practice under observation for 15 minutes as most anaphylaxis episodes begin within 15 minutes of vaccination.

G. Gives parents/legal guardians of children attending for vaccination under the PCIP a copy of the HSE post vaccination information “tear pad” (available from www.healthinformation.ie) or similar materials outlining simple post vaccination advice. This advice includes advising parents/legal guardians that children do NOT usually need any medicines including antipyretics (paracetamol or ibuprofen) or antibiotics after a vaccination. However if a child develops a fever (over 39.5°C) or is sore where the injection was given they can be given paracetamol or ibuprofen.

H. Takes queries from parents/legal guardians/clients about possible adverse reactions that occur post vaccination.

I. Provides parents/legal guardians/clients with the appropriate contact details so that they can inform the general practice team about any concerns following vaccination.

J. Reports adverse events to the IMB (see Section 6.0).

K. In the event that a client requires referral to hospital for vaccination under supervision arranges same (if necessary contact the local Department of Public Health for details).

6 Reporting adverse events following immunisation

Vaccines used in Ireland have been licensed by the European Medicines Agency (EMEA) in conjunction with the Irish Medicines Board (IMB). Following licensing of vaccines or other medicines the IMB is responsible for post marketing surveillance. Reports of adverse events are available on www.imb.ie. The IMB has when appropriate withdrawn products from the Irish market where there have been public safety concerns.

Details of adverse events following immunisation (AEFI) should be recorded on the adverse event report form and sent to the Irish Medicines Board.

Adverse events can be reported online at:
or an adverse event form can be downloaded, and returned by FREEPOST, from:
7 Common vaccine administration issues

When there are queries about giving a vaccine, contact the Assistant Directors of Public Health Nursing with responsibility for immunisation or a Specialist in Public Health Medicine in the local Department of Public Health for further advice (see Appendix G).

7.1 Administration of two or more vaccines to the client at the same visit
Where two or more vaccines are to be administered to clients at the same visit:

A. Each vaccine should be prepared appropriately (either presented in a prefilled syringe or requiring reconstitution) as per manufacturer’s instructions.

B. An agreed convention should be followed about the site of each vaccine as this will make it easier to attribute local reactions to the correct vaccine in the event of a report of an adverse reaction.

Examples include
- At the six month visit an infant receives three vaccines (6 in 1, PCV and MenC). As PCV is more reactogenic it is recommended that this vaccine is given in one limb and that 6 in 1 and MenC are given in a separate limb, separated by a distance of 2.5cms.
- An at risk adult receiving Influenza and PPV23- these vaccines should be given in separate limbs

The site of all vaccinations given should be recorded accurately.

7.2 Contraindications and precautions

Contraindications to vaccination

- **All vaccines**
  Confirmed anaphylactic reaction to the vaccine or to a constituent or a constituent of the syringe, syringe cap or vial (e.g. Latex anaphylaxis).

- **Live vaccines (e.g. MMR and varicella)**
  - Pregnancy
  - Immunosuppression, steroid and immunomodulator therapy (refer to the detailed guidance in the Immunisation Guidelines for Ireland).

Precautions for vaccination

- **Acute severe febrile illness:** defer until recovery.

- **Bleeding disorders:** Vaccines should be administered with caution to individuals with coagulation defects. If vaccines are given intramuscularly to those with a bleeding disorder or receiving anticoagulant treatment NIAC has recommended that it is prudent to use a 23-gauge (blue) needle and to apply pressure to the vaccine site for 1-2 minutes after the injection.
In those with a severe bleeding tendency vaccination can be scheduled shortly after administration of clotting factor replacement or similar therapy.

Administration by the subcutaneous route may be considered in those with severe bleeding disorders. MMR vaccine can be given by the subcutaneous route. However, immunogenicity of vaccines recommended for IM administration may not be as long-lasting if they are given subcutaneously. The parent/legal guardian/client should be advised of this.

**Immunosuppression:** The immune response of immunocompromised individuals to inactivated vaccines may be inadequate.

**Use of Tacrolimus (Protopic™) and other topical immunomodulators:**
It is advised that these preparations should be discontinued four weeks before the administration of live vaccines. They should not be restarted until four weeks after vaccination.

**Pregnancy:** Influenza vaccine is recommended for all pregnant women at any stage of pregnancy. Other inactivated vaccines may be administered in pregnancy (refer to the detailed guidance in the Immunisation Guidelines for Ireland). Live vaccines (e.g. MMR) are contraindicated in pregnancy.

### 7.3 Specific vaccine issues

**Influenza**
- Influenza vaccine is recommended during influenza season (October to April) for ALL pregnant women irrespective of the stage of pregnancy.
- People with a known anaphylactic hypersensitivity reaction to eggs can be given an influenza vaccine with a low ovalbumin content (<0.06 μg ovalbumin per dose).
- In children aged 12-23 months of age a 1 week interval is recommended between the administration of influenza vaccine and PCV.

**PPV23**
Booster doses of PPV23 are NOT Routinely recommended for immunocompetent people as there is a lack of evidence of improved immunity and an increased incidence of local side effects from repeated doses. 

A **ONCE ONLY** booster vaccination is recommended 5 years after the first vaccination for those
- Aged 65 years and older if they received vaccine more than 5 years before and were less than 65 years of age at the time of the first dose,
- Whose antibody levels are likely to decline rapidly e.g. asplenia, splenic dysfunction, immunosuppression, chronic renal disease or renal transplant.

A second dose of PPV23 vaccine is recommended 3 months after treatment if the first dose was given during chemotherapy or radiotherapy.

**MMR**
- MMR may be given at the same time or at any interval between any inactivated vaccine.
- MMR is a live vaccine and must not be administered within four weeks of other live vaccines e.g. BCG.
- Pregnancy should be avoided for 1 month after MMR vaccination.
  Vaccination should be deferred for between three and eleven months following the administration of blood or blood product (see Immunisation Guidelines for Ireland for full details).
- Patients who developed thrombocytopenia within six weeks of their first dose of MMR should undergo serological testing to determine if a second dose is necessary.

7.4 Latex allergy
Vaccines supplied in vials or syringes containing rubber
- should not be used in those who have had an anaphylactic reaction to latex.
- may be given to those with a latex allergy other than an anaphylactic reaction (e.g. those with a history of a contact allergy to latex gloves).

Check the SmPCs or contact the National Immunisation Office for advice.

7.5 Thiomersal
Thiomersal is a mercury-containing compound that has been used since the 1930s to prevent bacterial and fungal contamination in some vaccines. Thiomersal is not the same as methyl mercury, which can accumulate in the body and become toxic. Thiomersal contains a different form of mercury (ethyl mercury) which is metabolised and removed from the body much faster than methyl mercury.

A European review of the available evidence concluded that there is no evidence of harm from thiomersal in vaccines other than hypersensitivity reactions. The World Health Organization has concluded that there is no evidence of mercury toxicity in infants, children or adults exposed to thiomersal in vaccines.

None of the vaccines in the primary childhood immunisation programme contain thiomersal

7.6 Vaccine given too early
In the event that a vaccine has been given too early e.g. as part of the PCIP this vaccination should not be considered as part of the primary series as there may be a suboptimal response.

This early dose should be discarded and another dose given at least one month after the disregarded dose.

This should be reported as a medication error to the IMB (See Section 6.0). However inadvertently giving a dose less than 4 days before the minimum recommended interval is unlikely to have a significantly adverse effect on the immune response to that dose and so can be considered valid.


7.7 Vaccines given after the expiry date
If a vaccine is given after the expiry date (the last date of expiry month) there may be a suboptimal response.

A further dose should be given one month after the expired dose.
This should be reported as a medication error to the IMB (See Section 6.0).
7.8 Refusal of vaccination
In those instances where a parent/legal guardian/client refuse vaccination and all avenues of communication have been explored it is best practice that the parent/legal guardian/client sign a refusal forms (if available from the local immunisation office). In the instance where combination vaccines or multiple vaccines are recommended the name of each vaccine and the disease/diseases that they protect against should be clearly outlined in the refusal form.

If a refusal form is unavailable these details should be recorded in the patient notes.

8 Maintenance of the Cold Chain and Vaccine Ordering

8.1 Introduction
The “Cold Chain” is the system of correct storage, transport and maintenance of vaccines to ensure that they are protected from inappropriate temperatures and light from the time of manufacture to the time of administration. The safe temperature range for storage, transport and maintenance of vaccine to maintain their potency and efficacy of vaccine is between +2°C to +8°C.

It is the responsibility of designated member of the general practice team to ensure that all the procedures are adhered to.

The designated person at each vaccine delivery site should be nominated to ensure that all procedures are adhered to. In their absence an alternative member of staff must be available and trained.

**KNOW WHAT’S RIGHT FOR VACCINES**

Vaccines should be stored in a pharmaceutical refrigerator.

*Domestic refrigerators should not be used for vaccine storage.*

Do a monthly stock take and check expiry dates  
Always use your account number when ordering vaccines  
When your vaccines arrive  
  ○ check your order before signing for it  
  ○ place your vaccines in the fridge immediately  
  ○ put new stock at the back of the fridge and shorter dated stock at the front

Never use out of date vaccines  
Always keep the temperature between +2°C to +8°C  
Store vaccines in their original packaging  
Store vaccines on shelves not touching the sides of the fridge  
It is recommended that the fridge temperature is checked twice daily  
Use a switchless socket or if not available highlight the fridge must not be unplugged  
Return all expired vaccines in their original packaging  

**In the event of a power failure or breakdown in the “Cold Chain”**  
  ○ keep the fridge door closed  
  ○ contact the National Immunisation Office at 01 867 6108
8.2 Procedure for refrigerator maintenance

A. The vaccine refrigerator should not be overfilled and the vaccine boxes should not touch the sides or back of the refrigerator. Air needs to circulate around the packages.

B. Vaccine should always be stored in their original packaging. This packaging protects them from light and heat and this box carries the appropriate batch number and expiry date which is required for recording. Vaccines should not be removed from their packaging until required for use.

C. The vaccine refrigerator should be placed
   - in an appropriately ventilated room
   - away from any heat source
   - away from direct sunlight

Food and other goods should not be stored in the refrigerator.

D. A temperature monitoring chart should be on each vaccine refrigerator door.

E. The fridge temperature should be recorded ideally using a continuous electronic monitoring device. If not in place a minimum/maximum digital Celsius thermometer should be put in the middle of the refrigerator adjacent to the vaccines irrespective of whether the refrigerator incorporates a temperature indicator dial. Check on the accuracy of the thermometer every 12 months (change batteries etc) as a damaged probe or cable can affect readings.

F. It is recommended that the fridge temperature is checked twice daily i.e. minimum and maximum temperature records at the start of the morning and again at end of the clinic day with time of reading and sign/initial. (This is in line with recommendations from the USA Centers for Disease Control and Prevention).

G. When a temperature chart has been completed, replace it with a new chart and keep completed chart indefinitely.

H. The door should be closed as much as possible. Vaccine refrigerators should have a sticker to remind staff to keep opening to a minimum. (Reducing door openings helps to keep internal temperatures stable).

I. Containers of water can be placed in the refrigerator to help stabilise the temperature in the unit.

J. All interior and exterior surfaces of the refrigerator should be cleaned at least every six months with only a 1:10 solution of sodium hydrochlorite (or Milton). Any exposed coils on the back of the refrigerator must be kept clean and dust free. Vaccines should be stored in another refrigerator or cool box whilst doing this.

K. The refrigerator seals should be regularly inspected and defrosted if required, to prevent build up of ice, which will result in unstable temperatures and cause damage to vaccine vials.

L. A record of when defrosting or cleaning has been carried out should be made.
M. The electricity supply to the vaccine storage refrigerator should not be accidentally interrupted. This can be achieved by using a switchless socket or by placing cautionary notices on plugs and sockets such as “Vaccine Refrigerator” or “Do not turn off or disconnect”.

N. Vaccine storage procedures should be audited at least 12 monthly or more frequently if experiencing cold chain problems.

O. Ensure that adequate insurance for vaccine damage is in place in case of refrigerator breakdown to allow for vaccine replacement.

8.3 Procedure for ordering vaccines

A. Vaccine stocks should be kept to a minimum by regularly ordering only the quantity of vaccine required until the next delivery.

B. Vaccine stock should be rotated so that vaccines with the shortest expiry date are closest to hand.

C. A “vaccine stock sheet” should be kept to record the date and stock on hand and quantity ordered to facilitate monthly ordering.

D. The quantity of vaccine required should be determined by:
   - Existing stock level
   - Quantity used since last delivery
   - Storage volume within the refrigerator
   - Disease outbreaks

E. Vaccines should be ordered by emailing or faxing the HSE National Cold Chain Service (NCCS) (current contract holders are United Drug Distributors UDD).
   - E-mail vaccines@udd.ie
   - Fax number (01) 4637788

F. NCCS send a confirmatory email or fax outlining that they have received the order and confirming the vaccine delivery date. If confirmation is not received NCCS should be contacted directly.

G. Vaccines should be ordered by a specific date each month as per a prescribed schedule from the NCCS. Vaccines should be ordered at least 1 week before these dates.

H. Unused, unopened vaccines or vaccines that are past their expiry date or that deviated outside the Cold Chain should be returned to the NCCS deliveryman with a completed vaccine return form. Vaccine return forms are available to download from http://www.immunisation.ie/en/VaccineOrderingandStorage/
8.4 Procedure for accepting delivery

A. Vaccine deliveries must be signed for and stamped and must be checked against the order for discrepancies. Any discrepancies or any damage must be reported to the NCCS.

B. Vaccines must be placed immediately in the vaccine refrigerator and must never be left at room temperature.

C. The temperature on delivery should be checked and recorded to show that vaccines were in temperature on delivery.

D. The delivery docket should be filed as it contains details of the delivery, batch number and expiry dates of products.

E. Any returns should be ready to hand to the driver.

8.5 Procedure following breakdown in the “Cold Chain”

In accordance with product licence, all vaccines must be stored in a refrigerator between +2°C to +8°C and must not be frozen. A break down in the “Cold Chain” occurs when vaccines are NOT stored between +2°C to +8°C.

This can be due to
- Delay in refrigerating vaccines once delivered
- Faulty refrigerator
- Electrical power cut
- Unplugged refrigerator switch
- Open refrigerator door

Any use of the vaccine outside of the licensed storage conditions is at the doctor’s own responsibility.

If a refrigerator breakdown occurs

A. Check the temperature.

B. Ensure that the refrigerator door is closed and refrigerator is working. If the refrigerator is not working or holding temperature between +2°C to +8°C then move vaccines to a working refrigerator immediately.

C. Determine (if possible) how long the refrigerator has been outside temperatures between +2°C to +8°C.

D. Record date and time of breakdown.

E. Record type and number of vaccines which are in the refrigerator.

F. If temperatures outside the permitted range are recorded the Chief Pharmacist or Medical Officer at the National Immunisation Office should be contacted (Phone 087 9915452 or 01 8676108) for further advice. They will advise on a case by case basis whether it is appropriate to use the vaccines or whether they should be discarded.
G. Do not use or dispose of the vaccines until notified by the Chief Pharmacist or the Medical Officer at the National Immunisation Office.

H. Label vaccine “do not use” or appropriate marking when recommended.

I. Vaccines that cannot be used must be returned to the National Cold Chain service as per instructions from the National Immunisation Office.

If the refrigerator has electrical problems or a new refrigerator is required, record the temperature for 48 hours before using the refrigerator to store a new supply of vaccines. When a new refrigerator is placed in its permanent position, it should be allowed to stand for minimum of 24 hours before it is switched on. This allows gases to reach equilibrium before power is switched on. Then record the temperature for 48 hours to ensure it is maintaining the correct temperature.

In the event of a refrigerator breakdown ensure that an insurance claim is submitted for damaged vaccines and that this amount is passed on to the Local Health Office.

9 References

- A Guide to Data Protection Legislation for Irish General Practice Data Protection Working Group April 2011 Irish College of General Practitioners
  http://www.icgp.ie/go/in_the_practice/information_technology/data_protection


- Children First - National Guidance for the Protection and Welfare of Children.2011 Department of Children and Youth Affairs
  http://hsenet.hse.ie/CareGroupsHub/ChildrenandFamilies/Childrenfirst/

- Guidance To Nurses And Midwives On Medication Management - July 2007 An Bord Altranais

- Guidelines for Staff: Schools Immunisation Programme 2011/2012

- Healthcare professionals Frequently asked questions August 2011 National Immunisation Office

- Immunisation Guidelines for Ireland

- Training slides for Health Professionals, March 2011 National Immunisation Office

- Vaccine Storage and Handling Guide – December 2011, Centers for Disease Control and Prevention
  http://www.cdc.gov/vaccines/recs/storage/toolkit/storage-handling-toolkit.pdf

- Waste Management Awareness Handbook 2011 Health Service Executive
## National Immunisation Schedule 2013

<table>
<thead>
<tr>
<th>Age</th>
<th>Vaccines</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Birth</td>
<td>BCG</td>
</tr>
<tr>
<td>2 months</td>
<td>6 in 1 + PCV</td>
</tr>
<tr>
<td>4 months</td>
<td>6 in 1 + Men C</td>
</tr>
<tr>
<td>6 months</td>
<td>6 in 1 + PCV + Men C</td>
</tr>
<tr>
<td>12 months</td>
<td>MMR + PCV</td>
</tr>
<tr>
<td>13 months</td>
<td>Men C + Hib</td>
</tr>
<tr>
<td>4-5 years (Junior Infants)</td>
<td>4 in 1 + MMR</td>
</tr>
<tr>
<td>12-13 years (1st year second level schools)</td>
<td>Tdap</td>
</tr>
<tr>
<td>12-13 years (1st year second level schools)</td>
<td>HPV x 3 doses (girls only)</td>
</tr>
<tr>
<td>17-18 years* (6th year second level schools)</td>
<td>HPV x 3 doses (girls only)</td>
</tr>
<tr>
<td>All aged 65 years and older</td>
<td>Seasonal influenza vaccine</td>
</tr>
<tr>
<td>Those in specific medically at risk groups</td>
<td>+/-</td>
</tr>
<tr>
<td>Health care workers</td>
<td>Pneumococcal polysaccharide vaccine</td>
</tr>
</tbody>
</table>

*HPV catch up programme for girls in Sixth year of second level schools until the end of the 2013/2014 academic year
APPENDIX B

GP Practice administration issues

It is good practice to

A. Retain a register (preferably electronic using a GPIT accredited system) with client details which will allow for the easy identification and communication with people requiring vaccination. (See Appendix H for data entry standards used in HSE school immunisation programme).

B. Ideally record the client’s phone number and provide this to the HSE to enable SMS alerts and follow up either by the GP or the HSE. The client must be informed at time of data capture that in providing the mobile phone number they are consenting to its use for these limited purposes.

C. Confirm contact details with parents at every visit and notify HSE of any changes.

D. Ensure that there is a system of alerts and that clients are vaccinated opportunistically. Where a child is overdue a vaccination make all efforts to contact the parent and advise them that the child requires the next vaccinations.

E. Ensure that Data Protection and client privacy and confidentiality is maintained as part of the service provided.

F. Provide accurate immunisation details within one month to the HSE for uptake and payment purposes as appropriate using an approved methodology. This includes details of all immunisations carried out in General Practice with HSE supplied vaccine.

G. Ensure that batch numbers and details are kept updated for cross validation purposes on the practice management system.

H. Tick the outbreak box on the returns form if a vaccine is being given in response to an outbreak vaccination request from Public Health.

I. Notify the HSE of any reason to terminate the sending of communication and to allow accurate vaccine uptake statistics where
   a. a child moves out of the area
   b. a child dies
   c. the vaccine is refused
   d. the vaccine is contraindicated
APPENDIX C
Sample medication protocol

Medication Protocol for the administration of (insert name of vaccine) vaccination by registered general nurses employed as Practice Nurses in General Practice services contracted by the HSE.

This medication protocol is a specific written instruction for the administration of (insert name of vaccine) vaccine to groups of patients who may not be individually identified before presentation for treatment.

This medication protocol enables registered nurses and midwives in the primary care services of a General Practitioner holding an HSE Immunisation Contract to administer (insert name of vaccine) with reference to and guidance from An Bord Altranais:

- Summary of Product Characteristics and Patient Information Leaflet as detailed by the Irish Medicines Board and available at www.imb.ie and www.medicines.ie

An Bord Altranais defines medication protocols as “written directions that allow for the supply and administration of a named medicinal product by a nurse or midwife in identified clinical situations. A medication protocol involves the authorisation of the nurse/midwife to supply and administer a medication to groups of patients in a defined situation meeting specific criteria and who may not be individually identified before presentation for treatment. An individually named prescription is not required for the supply and administration of medication when a medication protocol is in effect” (An Bord Altranais, 2007, p35).

For further information on Medication Protocols and their use in general practice please contact your local Professional Development Coordinator for Practice Nurses.
### 1.0 Critical Elements

<table>
<thead>
<tr>
<th>Name of Organisation where protocol applies</th>
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</thead>
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<table>
<thead>
<tr>
<th>Date the protocol comes into effect</th>
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<table>
<thead>
<tr>
<th>Date for review of protocol* ( *2 years from date of production or when required if new information available)</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Names and signatures of protocol authors and reviewers</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name(s) and Signature(s) of the employing authority who is authorising the implementation of the protocol</th>
</tr>
</thead>
</table>

### 2.0 Clinical Criteria

<table>
<thead>
<tr>
<th>Clinical Condition for use of the protocol</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Circumstances in which the medication protocol applies</th>
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</thead>
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<table>
<thead>
<tr>
<th>Inclusion criteria for patient/service user treatment using the protocol</th>
</tr>
</thead>
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<table>
<thead>
<tr>
<th>Exclusion criteria for patient/client treatment using the medication protocol</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Actions to be taken for those who are excluded from the Protocol</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation required to support implementation of the medication protocol</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>3.0 Details of Medication to be supplied</td>
</tr>
<tr>
<td>Name of Medication</td>
</tr>
<tr>
<td>Instructions for administration of the vaccine</td>
</tr>
</tbody>
</table>

N.B. A General Practitioner must be on the practice premises during the administration of vaccines and during the 15 minute post vaccination observation period to assist with any adverse events which may result from vaccination administration.

<table>
<thead>
<tr>
<th>Warnings and precautions for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Side Effects</td>
</tr>
<tr>
<td>Potential adverse reactions and procedures for treatment of same</td>
</tr>
<tr>
<td>Procedure for reporting Adverse Drug Reactions to the Irish Medicines Board</td>
</tr>
<tr>
<td>Procedure for the reporting and documentation of errors and near misses involving the medication</td>
</tr>
<tr>
<td>Mechanisms for storage of medications and for obtaining supply</td>
</tr>
<tr>
<td>Resources and equipment required</td>
</tr>
<tr>
<td>Audit process to identify appropriate use of the protocol or unexpected outcomes</td>
</tr>
<tr>
<td>4.0 Patient/service-user care information</td>
</tr>
<tr>
<td>Advice to be given to the patient/service user and/or carer before and/or after treatment</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Provision of Patient Information Leaflet/Fact Sheet</td>
</tr>
<tr>
<td>Details of any necessary follow-up, action and referral arrangements</td>
</tr>
<tr>
<td>5.0 Staff authorised to use protocol</td>
</tr>
<tr>
<td>Staff authorised to use protocol</td>
</tr>
<tr>
<td>Professional qualifications, training, experience and competence relevant to this medication protocol</td>
</tr>
<tr>
<td>Requirements for staff for continuing training and education for supplying medication using protocol</td>
</tr>
</tbody>
</table>
## APPENDIX D

### Self assessment of competency to supply and administer vaccinations under medication protocol

I have attended an Immunisation Study Day/ Update in the past 2 years  
Yes ☐ No ☐

I have attained / have plans to attain competencies noted in ‘Guidelines for Immunisations carried out in General Practice’ and in practice Medication Protocols  
Yes ☐ No ☐

Date of planned training .................................................................

<table>
<thead>
<tr>
<th>Domain of Practice</th>
<th>Performance Criteria:</th>
<th>Needs Theory Date/Initial</th>
<th>Needs Practice Date/ Initial</th>
<th>Competent Date/Initial</th>
</tr>
</thead>
</table>
| 1, 2, 4, 5         | I understand the role and function of medication protocols in the context of An Bord Altranais guidelines:  
• The Code of Professional Conduct  
• Guidance to Nurses and Midwives on Medication Management  
• Scope of Nursing and Midwifery Practice. |                         |                             |                       |
<p>| 1, 2, 4, 5         | I carry out vaccination according to ‘Guidelines for Immunisations carried out in General Practice’. |                         |                             |                       |
| 1, 2, 4, 5         | I can utilise the guidance document produced by NIAC “Immunisation Guidelines for Ireland 2008” and all subsequent amendments in application of practice. |                         |                             |                       |
| 1, 2, 4            | I am aware of and comply with the guidance on ordering, storage and stock rotation of vaccines. |                         |                             |                       |
| 1, 2, 3, 4         | I can obtain informed consent from parent/guardian including the information regarding the indications. |                         |                             |                       |
| 1, 2, 3            | I can explain the expected side effects post vaccination and management of same. |                         |                             |                       |
| 1, 2, 4            | I am aware of all vaccines given in general practice and their role in the management of vaccine preventable illness. |                         |                             |                       |
| 1, 2, 4            | I can outline the inclusion /exclusion criteria for use of the medication protocols. |                         |                             |                       |
| 1, 2, 3, 4         | I can refer those who are excluded from the protocol to GP for individual assessment. |                         |                             |                       |</p>
<table>
<thead>
<tr>
<th>Domain of Practice</th>
<th>Performance Criteria: Critical Element</th>
<th>Needs Theory Date/Initial</th>
<th>Needs Practice Date/Initial</th>
<th>Competent Date/Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2, 3, 4</td>
<td>I can undertake a clinical assessment of a patient within the scope of the medication protocols.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2, 4</td>
<td>I am aware of the correct dosage of each vaccine.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 4</td>
<td>I am aware of the correct preparation / reconstitution of vaccines.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2, 4</td>
<td>I can prepare all vaccines using aseptic technique.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1, 2, 4</td>
<td>I can follow the correct procedure for the intramuscular administration of vaccine(s).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 2, 3</td>
<td>I am aware of potential adverse reactions in relation to vaccination.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 2, 4</td>
<td>I am aware of the procedures for treatment of adverse reactions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 2, 3</td>
<td>I understand the procedure for reporting and documentation of medication errors/near misses.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 2, 3</td>
<td>I understand the procedure for the reporting and documentation of adverse drug reactions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 2, 3, 4</td>
<td>I am aware of relevant written/oral instructions to be given to patients, parents/guardians with regard to completion of their vaccination programme.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 4</td>
<td>I dispose of all equipment and sharps in accordance with standard precautions and local policies.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1, 2, 4</td>
<td>I record the administration of vaccines as required by practice and HSE documents and update patients record as appropriate.</td>
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<td></td>
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</tr>
</tbody>
</table>
I have sufficient theoretical knowledge and practice to undertake this role, and I acknowledge my responsibility to maintain my own competence in line with the Scope of Nursing Practice

Practice Nurse’s Signature: ____________________________ Date: ______________

If any deficits in theory and/or practice identified, the nurse must discuss with authorising General Practitioner and implement appropriate action plan to achieve competency within an agreed time frame.

Action necessary to achieve competency:

…………………………………………………………………………………………………………
…………………………………………………………………………………………………………
…………………………………………………………………………………………………………
…………………………………………………………………………………………………………

Date to be achieved: ____________________________

Supporting evidence of measures taken to achieve/enhance competency:

…………………………………………………………………………………………………………
…………………………………………………………………………………………………………
…………………………………………………………………………………………………………
…………………………………………………………………………………………………………

Practice Nurse’s Signature: ____________________________ Date: ______________
APPENDIX E
Roles and responsibilities of HSE staff

1 Introduction
This section outlines the roles and responsibilities of HSE staff to ensure the safe and effective delivery of the immunisation programme. Roles and responsibilities may be assigned on a local basis according to the professional qualifications and expertise of staff.

2 Managerial role and responsibilities
A. Area Managers should ensure that all administrative staff involved in the immunisation programme carried out in general practice are aware of these guidelines and should facilitate any training required.
B. Directors of Public Health Nursing should ensure that all Assistant Directors of Public Health Nursing with responsibility for immunisation are aware of these guidelines and should facilitate any training required.
C. Professional Development Coordinators for Practice Nurses should be familiar of these guidelines and should facilitate any training required in collaboration with the local Department of Public Health and the local immunisation coordinators.

3 Role of HSE clerical/administrative staff
HSE clerical/administrative staff should
A. Create and maintaining a database of children born in the state.
B. Add clients to the database (new entrants to Ireland, EU originating, Immigrants, Asylum Seekers, etc.) as they become aware of same.
C. Provide immunisation information (either via the public health nurse, publications or by mail) to parents/legal guardians.
D. Send out invitations/alerts for vaccination events to parents/legal guardians.
E. Liaise with general practice in relation to changes, developments, events etc.
F. Provide a means of making vaccination returns for uptake and payment purposes. Distribute return forms.
G. Provide a relevant Privacy Statement to general practice.
H. Ensure that GPs are set up with appropriate immunisation contracts, including ensuring that all necessary checks are done at appropriate intervals e.g. indemnity, registered with the Medical Council etc.
I. Ensure that GPs with immunisation contracts are appropriately set up with the National Cold Chain Service.
J. Provide vaccine and vaccination related information to GPs.
K. Retain a register of all Immunisation Service Providers and their related details including: Practice(s) name(s) and addresse(s), registration details, cold chain and immunisation account numbers and details, payment account and details, messaging ID for both GP and practice.
L. Provide payment for vaccinations given as appropriate.
M. Provide detailed payment information both on line and manually to all GPs and GP Practices and answer queries relating to same.
N. Where possible advise general practice of any deaths relevant to them.
O. Follow up on non-starters, late-starters, defaulters in conjunction with general practice via Assistant Director of Public Health Nursing with responsibility for immunisation.
P. Provide information in relation to defaulters, uptake blackspots, outbreaks as appropriate.
Q. Ensure that when a client has moved out of area and address of new location is known that client details are sent to the immunisation section for the new location.
R. Ensure that when a client has died that this is flagged on the patient file and other relevant HSE sections are notified.

4 Role of HSE Role of Assistant Director of Public Health Nursing with responsibility for immunisation

The Assistant Director of Public Health Nursing with responsibility for immunisation should

A. Ensure that all public health nurses receive any relevant guidance regarding the childhood and adult immunisation programmes.

B. Ensure that all public health nurses obtain details of the child's general practitioner at the first public health nurse visit and that this is relayed to the immunisation section.

C. Ensure that all public health nurses distribute the booklet “Your child’s immunisation- A guide for parents” at the first public health nurse visit.

D. Ensure that all public health nurses provide advice at the first PHN visit on the importance of vaccination and at each subsequent encounters with parents/legal guardians and adults.

E. Develop good working relationships with the general practice team in the area and provide support in relation to clinical queries, best practice etc.

F. Obtain monthly listing of those children who have defaulted from the immunisation programme.

G. Follow up defaulters with local public health nurse and general practice team.

H. Liaise with Practice Nurse Development Coordinator for the area.
## HSE DUBLIN MID-LEINSTER

<table>
<thead>
<tr>
<th>ADDRESS</th>
<th>NAME</th>
<th>AREA</th>
<th>PHONE</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunisation Section Primary Care Unit Springfield Mullingar Co. Westmeath Fax No 044 9384499</td>
<td>Olivia Finerty</td>
<td>Co. Westmeath</td>
<td>044 9384423</td>
<td><a href="mailto:Olivia.Finerty@hse.ie">Olivia.Finerty@hse.ie</a></td>
</tr>
<tr>
<td></td>
<td>Leanne Murphy</td>
<td>Co. Laois</td>
<td>044 9384422</td>
<td><a href="mailto:Leanne.Murphy@hse.ie">Leanne.Murphy@hse.ie</a></td>
</tr>
<tr>
<td></td>
<td>Noeleen Deegan</td>
<td>Co. Longford</td>
<td>044 9384432</td>
<td><a href="mailto:Noeleen.Deegan@hse.ie">Noeleen.Deegan@hse.ie</a></td>
</tr>
<tr>
<td></td>
<td>Clare Taaffe</td>
<td>Co. Offaly</td>
<td>044 9384425</td>
<td><a href="mailto:Clare.Taaffe@hse.ie">Clare.Taaffe@hse.ie</a></td>
</tr>
<tr>
<td>Immunisation Department Dr. Steevens’ Hospital Dublin 8.</td>
<td>Brian Morrisroe Emer Gannon Jacinta McNevin Amanda Carr</td>
<td>Dublin South Central Dublin West LHO 3 and 5</td>
<td>01 6352021 01 6352065 01 6352050 01 6352067</td>
<td><a href="mailto:brian.morrisroe1@hse.ie">brian.morrisroe1@hse.ie</a> <a href="mailto:emer.gannon@hse.ie">emer.gannon@hse.ie</a> <a href="mailto:jacinta.mcnevin@hse.ie">jacinta.mcnevin@hse.ie</a> <a href="mailto:amanda.carr@hse.ie">amanda.carr@hse.ie</a></td>
</tr>
<tr>
<td>Community Services Old County Rd Health Centre Crumlin Dublin 12</td>
<td>David Walsh</td>
<td>Dublin South West LHO 4</td>
<td>01 4154735</td>
<td><a href="mailto:David.Walsh@hse.ie">David.Walsh@hse.ie</a></td>
</tr>
<tr>
<td>St Marys Caddockstown Road Naas Co. Kildare</td>
<td>Mary Sherry Derval Glynn</td>
<td>Kildare West Wicklow LHO 9</td>
<td>045 907 928 045 907 926 045 907 937</td>
<td><a href="mailto:mary.sherry@hse.ie">mary.sherry@hse.ie</a></td>
</tr>
<tr>
<td>Immunisation Section Glenside Rd. Wicklow</td>
<td>Denis Mangan</td>
<td>Wicklow LHO 10</td>
<td>0404 60672</td>
<td><a href="mailto:Denis.Mangan@hse.ie">Denis.Mangan@hse.ie</a></td>
</tr>
<tr>
<td>HSE Immunisation Section Tivoli Rd Dun Laoghaire Co. Dublin</td>
<td>Annette Barnes</td>
<td>Dublin South LHO 1</td>
<td>01 2365244</td>
<td><a href="mailto:Annette.Barnes@hse.ie">Annette.Barnes@hse.ie</a></td>
</tr>
<tr>
<td>Immunisation Section Vergemount Hall Clonskeagh Dublin</td>
<td>Mary McKernan</td>
<td>Dublin South East LHO 2</td>
<td>01 2680379</td>
<td><a href="mailto:Mary.McKernan@hse.ie">Mary.McKernan@hse.ie</a></td>
</tr>
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## HSE DUBLIN NORTH EAST

<table>
<thead>
<tr>
<th>ADDRESS</th>
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</thead>
<tbody>
<tr>
<td>HSE-Dublin North West, Units 4/5 Nexus Building, Blanchardstown Corporate Park, Ballycoolin, Dublin 15</td>
<td>Ciara Davidson</td>
<td>Dublin North West LHO 6</td>
<td>01- 8975140</td>
<td><a href="mailto:Ciara.Davidson@hse.ie">Ciara.Davidson@hse.ie</a></td>
</tr>
<tr>
<td>Ballymun Health Care Facility Civic centre Main Street Ballymun Dublin 9</td>
<td>Mary Devine</td>
<td>Dublin North Central LHO 7</td>
<td>01 8467289</td>
<td><a href="mailto:mary.devine@hse.ie">mary.devine@hse.ie</a></td>
</tr>
<tr>
<td>Community Services Cromcastle Rd Coolock Dublin 5</td>
<td>Anne Gorman</td>
<td>North Dublin LHO 8</td>
<td>01 8164259</td>
<td><a href="mailto:Anne.Gorman@hse.ie">Anne.Gorman@hse.ie</a></td>
</tr>
<tr>
<td>Primary Care Railway St. Navan Co. Meath</td>
<td>Anita Reilly</td>
<td>Meath Louth Cavan Monaghan</td>
<td>046 9076485</td>
<td><a href="mailto:Anita.Reilly@hse.ie">Anita.Reilly@hse.ie</a></td>
</tr>
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### HSE SOUTH

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Child Health Office Community Care Centre Western Rd. Clonmel, Co. Tipperary Fax No. 052 77695</td>
<td>Siobhan McCall</td>
<td>South Tipperary</td>
<td>052 6177246</td>
<td><a href="mailto:Siobhan.McCall@hse.ie">Siobhan.McCall@hse.ie</a></td>
</tr>
<tr>
<td>Child Health Office Community Care Centre James’ Green, Kilkenny</td>
<td>Siobhan Hennessy</td>
<td>Co. Carlow Co. Kilkenny</td>
<td>056 7784670</td>
<td><a href="mailto:Siobhan.T.Hennessy@hse.ie">Siobhan.T.Hennessy@hse.ie</a></td>
</tr>
<tr>
<td>Child Health Office Community Care Offices Georges St., Wexford</td>
<td>Susan O’Hara</td>
<td>Co. Waterford</td>
<td>053 9185749</td>
<td><a href="mailto:Susan.Ohara@hse.ie">Susan.Ohara@hse.ie</a></td>
</tr>
<tr>
<td>Child Health Office Community Care Centre Cork Rd., Waterford</td>
<td>Caroline McGrath</td>
<td>Co. Waterford</td>
<td>051 842908</td>
<td><a href="mailto:Caroline.Mcgrath@hse.ie">Caroline.Mcgrath@hse.ie</a></td>
</tr>
<tr>
<td>Immunisation Unit HSE – Floor 2 Mallow Primary Healthcare Centre, Gouldshill, Mallow, Co. Cork.</td>
<td>Caroline J. Clifford</td>
<td>Cork City &amp; County</td>
<td>022 58780</td>
<td><a href="mailto:Caroline.J.Clifford@hse.ie">Caroline.J.Clifford@hse.ie</a></td>
</tr>
<tr>
<td>Immunisation Unit, Community Services Rathass, Tralee, Co. Kerry</td>
<td>Catherine Kearney</td>
<td>Kerry</td>
<td>066 7195682</td>
<td><a href="mailto:Catherine.Kearney@hse.ie">Catherine.Kearney@hse.ie</a></td>
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### HSE WEST

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</thead>
<tbody>
<tr>
<td>Immunisation Dept. Finn Valley Centre, Stranorlar, Co. Donegal</td>
<td>Eileen Clancy</td>
<td>Donegal</td>
<td>074 9189111</td>
<td><a href="mailto:Eileen.Clancy@hse.ie">Eileen.Clancy@hse.ie</a></td>
</tr>
<tr>
<td>Immunisation Dept Markievicz Hse. Sligo.</td>
<td>Bernie Flatley</td>
<td>Sligo Leitrim West Cavan</td>
<td>071 9155148</td>
<td><a href="mailto:Bernie.flatley@hse.ie">Bernie.flatley@hse.ie</a></td>
</tr>
<tr>
<td>Immunisation Office Sandfield Centre Ennis, Co. Clare</td>
<td>Denise Reidy</td>
<td>Co. Clare</td>
<td>065 6868039</td>
<td><a href="mailto:Denise.Reidy@hse.ie">Denise.Reidy@hse.ie</a></td>
</tr>
<tr>
<td>Immunisation Office Raheen, Limerick</td>
<td>Jane Ashworth</td>
<td>Limerick City &amp; County</td>
<td>061 483935</td>
<td><a href="mailto:Jane.Ashworth@hse.ie">Jane.Ashworth@hse.ie</a></td>
</tr>
<tr>
<td>Immunisation Dept., Health Centre, Tyone, Nenagh, Co. Tipperary</td>
<td>Eileen P. Ryan</td>
<td>Tipperary North Riding East Limerick</td>
<td>067 46416</td>
<td><a href="mailto:EileenP.Ryan@hse.ie">EileenP.Ryan@hse.ie</a></td>
</tr>
<tr>
<td>Child Health / Immunisation Office Community Services 25, Newcastle Rd., Galway</td>
<td>Lilly Coffey</td>
<td>Galway City &amp; County</td>
<td>091 546180</td>
<td><a href="mailto:Lilly.Coffey@hse.ie">Lilly.Coffey@hse.ie</a></td>
</tr>
<tr>
<td>Child Health / Immunisation Office Community Services Lanesboro Rd., Roscommon</td>
<td>Catriona Harrington</td>
<td>Roscommon</td>
<td>090 6637514</td>
<td><a href="mailto:Catriona.Harrington@hse.ie">Catriona.Harrington@hse.ie</a></td>
</tr>
<tr>
<td>Child Health / Immunisation Office Community Services St. Mary’s Headquarters, Castlebar, Co. Mayo</td>
<td>Marian Murphy</td>
<td>Mayo</td>
<td>094 9042518</td>
<td><a href="mailto:Marion.Murphy@hse.ie">Marion.Murphy@hse.ie</a></td>
</tr>
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# APPENDIX G
## Departments of Public Health

### HSE SOUTH

<table>
<thead>
<tr>
<th>Area</th>
<th>Director of Public Health</th>
<th>Department of Public Health</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilkenny / Carlow / Waterford / Wexford / South Tipperary</td>
<td>Director of Public Health: Dr Orlaith O’Reilly</td>
<td>Department of Public Health Health Service Executive Dublin Road Lacken Kilkenny</td>
<td>Tel: (056) 7784124 Fax: (056) 7784393 ID Fax: (056) 7784599 Email: <a href="mailto:healthprotection.se@hse.ie">healthprotection.se@hse.ie</a></td>
</tr>
<tr>
<td>Cork / Kerry</td>
<td>Director of Public Health: Dr Elizabeth Keane</td>
<td>Department of Public Health Health Service Executive Floor 2 - Block 8 St. Finbarr’s Hospital Douglas Road Cork.</td>
<td>Tel: (021) 4927601 Fax: (021) 4923257 ID Fax Cork: (021) 4923257 ID Fax Kerry: (066) 7184542 Email: <a href="mailto:dphoncall.south@hse.ie">dphoncall.south@hse.ie</a></td>
</tr>
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### HSE WEST

<table>
<thead>
<tr>
<th>Area</th>
<th>Director of Public Health</th>
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<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donegal / Sligo / Leitrim</td>
<td>Director of Public Health: Dr Peter Wright</td>
<td>Department of Public Health Health Service Executive Iona House Upper Main Street Ballyshannon Co. Donegal</td>
<td>Tel: (071) 9174750 Fax: (071) 9852901 Email: <a href="mailto:info@hse.ie">info@hse.ie</a></td>
</tr>
<tr>
<td>Limerick / Clare / North Tipperary</td>
<td>Director of Public Health: Dr Diarmuid O’Donovan</td>
<td>Department of Public Health Health Service Executive Mount Kennett House Henry Street Limerick</td>
<td>Tel: (061) 483338 Fax: (061) 464205 Email: <a href="mailto:dphoncall.midwest@hse.ie">dphoncall.midwest@hse.ie</a></td>
</tr>
<tr>
<td>Galway / Mayo / Roscommon</td>
<td>Director of Public Health: Dr Diarmuid O’Donovan</td>
<td>Department of Public Health Health Service Executive Merlin Park Galway</td>
<td>Tel: (091) 775200 Fax: (091) 758283 Email: <a href="mailto:phdoc.west@hse.ie">phdoc.west@hse.ie</a></td>
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### HSE Dublin North East

<table>
<thead>
<tr>
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<th>Department of Public Health</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cavan / Louth / Meath / Monaghan</td>
<td>Director of Public Health: Dr Patrick O’Sullivan</td>
<td>Department of Public Health Health Service Executive Railway Street Navan Co. Meath</td>
<td>Tel: (046) 9076412 Fax: (046) 9072325</td>
</tr>
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</table>

### HSE Dublin Mid Leinster

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<tr>
<th>Area</th>
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<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laois / Offaly / Longford / Westmeath</td>
<td>Director of Public Health: Dr Phil Jennings</td>
<td>Department of Public Health Health Service Executive HSE Area Office Arden Road Tullamore Co. Offaly.</td>
<td>Tel: (057) 9359891 General Fax: (057) 9359906 ID Fax: (057) 9359907 Email: <a href="mailto:hprotmidlands@hse.ie">hprotmidlands@hse.ie</a></td>
</tr>
<tr>
<td>Dublin / Kildare / Wicklow</td>
<td>Director of Public Health: Dr Margaret Fitzgerald</td>
<td>Department of Public Health Health Service Executive Dr. Steeven’s Hospital Dublin 8.</td>
<td>Tel: Main Switch (01) 6352000 Direct telephone lines for Infectious Disease Notifications: Tel (01) 6352145 (office hours) Fax: (01) 6352103</td>
</tr>
</tbody>
</table>
APPENDIX H
Data Entry Standards used in HSE school immunisation programme

Data accuracy is very important. Care should be given to the correct spelling of client demographic details and GP details. All Mandatory Fields must be completed correctly with meaningful and accurate data. In addition to the mandatory fields, users should make every effort to input as much client information as possible. If additional information is entered on forms in notes fields or on the back of the form where there is no data entry field available this information should be entered into the notes field.

Data entry of names:
Ensure that the name entered in the Surname field is the family name and that the name entered in the First Name field is the first or given name of the client.

Surname Data Entry Convention to be followed
Surname should be input without any spelling abbreviations, commas, apostrophes, dashes etc. No characters other than alpha characters (letters) are acceptable in the surname field.
Names prefixed with Al should be entered as Al space Hussain i.e. Al Hussain
Names prefixed with MC should be entered as MC space i.e. Mc Carthy
Names prefixed with MAC should be entered as Mac space i.e. Mac Amhlaigh
Names prefixed with O’ should be entered as O space i.e. O Connor
Names prefixed with D’ should be entered as D space i.e. D Eathe
Names prefixed with Ñi should be entered as Ni space i.e. Ni Bhroin
Names prefixed with Nic should be entered as Nic space i.e. Nic Ailin
Names prefixed with De should be entered as De space i.e. De Burca

Double barrel names should also be entered without commas, apostrophes, dashes etc. Enter with a space between names i.e. Tierney Monahan not Tierney-Monahan

First Name Data Entry Convention to be followed
Forenames must be entered in full. Initials or spelling abbreviations are not acceptable e.g. type Michael not Mi, Margaret not Mags, Patrick Joseph and not Patk J. etc. Junior/Senior: Where the suffix is used in a client’s name, it must be typed in full with brackets directly after the forename e.g. Michael (Junior) or Patrick (Senior). Ensure that the proper first name is given and recorded not the “known as” name i.e. Margaret rather than Mags. Where the client uses an alias name which differs considerably from their official forename, this may need to be recorded for correspondence and identification purposes. In such cases, the alias name should be type in brackets directly after the official forename e.g. Margaret (Peggy). Please note that aliases are not to be confused with name abbreviations such as Robert (Bobby).

Date of Birth should be entered in the European way i.e. DD/MM/YYYY

Mobile Numbers may be used to send short SMS messages therefore it is important that they are collected and recorded accurately. Enter number as nnnnnnnnnn e.g. 0862549801 leave no space between numbers (do not enter anything else into this field)

Address
Abbreviations for addresses are not acceptable. All mandatory address fields must be completed correctly and information typed in the appropriate fields. All elements of the address must be typed in full without any dashes, hyphens etc. e.g. Saint Marys Street.
The following common address must be entered in full: Avenue, Apartments, Circular, Cottages, Court, Crescent, Drive, East, Estate, Garden, Glade, Grove, Heights, House, Lawn, Lower, Middle, North, Parade, Park, Place, Road, Saint, Square, Terrace, Upper, Walk, West.

**Apartment No.** If the client address contains an apartment number, type the word Apartment and the appropriate number in the Apartment field e.g. Apartment 7

**Care of** – Some clients may be residing ‘care of’ someone or somewhere. This should be entered as c/o. When entering a c/o location, type this information in the first line of address i.e. c/o Mary Burke.
Glossary of Terms and Definitions

Immunisation denotes the process of artificially inducing or providing immunity. This may be either active or passive.

Active immunisation is the administration of a vaccine or toxoid in order to stimulate production of an immune response.

Passive immunisation is the administration of preformed antibodies (such as HNIG, specific antibody preparation and antitoxins) in order to provide temporary immunity.

Toxoid is a modified bacterial toxin that has been rendered non-toxic but has the ability to stimulate the formation of antitoxin.

Vaccine is a suspension of live attenuated or inactivated micro-organisms or fractions thereof, administered to induce immunity and thereby prevent infectious disease.

Inactivated vaccine is a vaccine that contains killed bacteria or viruses. The response may be weaker than for a live vaccine and so repeated doses are often needed.

Live attenuated vaccine is a vaccine that contains a weakened strain of live bacteria or viruses that replicate in the body and induce a longer-lasting immunity than inactivated vaccines.

Vaccination is the term used to refer to the administration of any vaccine or toxoid.

Adverse event following immunisation (AEFI): is an unwanted or unexpected event occurring after the administration of vaccine(s). Such an event may be caused by the vaccine(s) or may occur by chance after vaccination (i.e. it would have occurred regardless of vaccination)

Vaccine abbreviations:

4 in 1 Diphtheria, acellular Pertussis, Inactivated Polio, Tetanus vaccine
6 in 1 Diphtheria, Haemophilus influenzae B, Hepatitis B, acellular Pertussis

Inactivated Polio, Tetanus vaccine

BCG Bacille Calmette-Guerin vaccine

Hib Haemophilus influenzae B vaccine

HPV Human Papillomavirus vaccine

Men C Meningococcal C conjugate vaccine

MMR Measles, Mumps, Rubella vaccine

PCV Pneumococcal conjugate vaccine

PPV Pneumococcal polysaccharide vaccine

Tdap Low dose tetanus, diphtheria and pertussis vaccine
Guidelines for VACCINATIONS in General Practice