# Table of Contents

**Executive Summary**  
3

1 **Purpose**  
4

2 **Scope of the Guidelines**  
4

3 **Immunisation Schedules**  
5

3.1 Introduction  
5

3.2 Primary Childhood Immunisation Programme  
5

3.3 Schools Immunisation Programme  
6

3.4 Seasonal influenza and pneumococcal polysaccharide campaigns  
6

3.5 Vaccination of late entrants/defaulters from vaccination programme  
6

3.6 Vaccinations in pregnancy  
6

3.7 Other vaccinations  
7

4 **Carrying out Vaccinations in General Practice**  
7

4.1 Introduction  
7

4.2 Setting up and training  
7

4.3 General Practitioner role  
8

4.4 Administration of vaccines under individual prescription or Medication Protocol  
8

4.5 Vaccinator role and responsibilities (GPs and Practice Nurses)  
9

5 **Procedures**  
9

5.1 Before vaccine administration  
9

5.2 Consent issues  
10

5.3 Vaccine administration  
11

5.4 After vaccine administration  
12

6 **Reporting adverse events following immunisation**  
12

7 **Common vaccine administration issues**  
13

7.1 Administration of two or more vaccines to the client at the same visit  
13

7.2 Contraindications and precautions  
13

7.3 Specific vaccine issues  
14

7.4 Latex allergy  
15

7.5 Thiomersal  
15

7.6 Vaccine given too early  
15

7.7 Vaccine given after the expiry date  
15

7.8 Refusal of vaccination  
15
8 Maintenance of the Cold Chain and Vaccine ordering

8.1 Introduction
8.2 Procedure for fridge maintenance
8.3 Procedure for ordering vaccines
8.4 Procedure for accepting delivery
8.5 Procedure for stock rotation and disposal
8.6 Procedure following breakdown in the “Cold Chain”

9 References

Appendix A: National Immunisation Schedule 2015
Appendix B: Catch Up Immunisation Schedule
Appendix C: GP Practice administration issues
Appendix D: Sample medication protocol
Appendix E: Self assessment competency tool
Appendix F: Roles and responsibilities of HSE staff
Appendix G: HSE Area Immunisation Unit Directory
Appendix H: Contact details for Departments of Public Health
Appendix I: Data Entry Standards used in HSE school immunisation programme

Glossary of Terms and Definitions
Executive Summary

A multidisciplinary committee was established in 2012 by the Health Service Executive (HSE) to develop guidelines for best practice for immunisations carried out in general practice on behalf of the HSE.

These guidelines have been updated because of the new primary childhood immunisation schedule for all children born on or after 1st July 2015.

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:

- Summary of Product Characteristics (SmPCs) for each of the vaccines available at [www.hpra.ie](http://www.hpra.ie) or [www.medicines.ie](http://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, 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 Director 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.hse.ie/eng/health/immunisation/hcpinfo/guidelines/

These guidelines have been updated because of the new primary childhood immunisation schedule for all children born on or after 1st July 2015.

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
  http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/
  http://www.hse.ie/eng/health/immunisation/hcpinfo/trainingmanual/
- Immunisation training slides for Health Professionals, National Immunisation Office 2011
  http://www.hse.ie/eng/health/immunisation/hcpinfo/trainingmanual/
- Summary of Product Characteristics (SmPCs) for each of the vaccines available at
  www.hpra.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
http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/

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

3.2 Primary Childhood Immunisation Programme
The Primary Childhood Immunisation (PCI) schedule is changing for those children born on or after July 1st 2015. The schedule for meningococcal C (MenC) vaccine is changing from three doses at 4, 6, 13 months to two doses at 4 and 13 months because of evidence that a single dose of MenC vaccine provides protection for the first year of life. See Appendix A.

The birth cohort in Ireland is approximately 69,000 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 96% in 2014
- Measles, mumps and rubella (MMR) vaccine uptake at 24 months has increased from 84% in 2005 to 93% in 2014

The latest HPSC statistics are available at
http://www.hpsc.ie/hpsc/A-Z/VaccinePreventable/VaccinationVImmunisationUptakeStatistics/

The primary childhood immunisation programme (PCIP) comprises

- BCG vaccination (given by HSE doctors in HSE clinics or maternity hospitals)
- Vaccinations delivered in general practice in the first years of life

The current (2015) 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 (2015) 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 91% and MMR was 91% in 2013/2014 http://www.hpsc.ie/A-Z/VaccinePreventable/Vaccination/ImmunisationUptakeStatistics/ImmunisationuptakestatisticsforJuniorInfants/

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/epinsight/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 http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/chapter16.pdf

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 catch up schedule (see Appendix B) in the Immunisation Guidelines for Ireland available at http://www.hse.ie/eng/health/immunisation/hcpinfo/frequentlyaskedquestions/catchupvacc/Guidelateentry.pdf

Those who move to Ireland to live, work or study should be checked to make sure they have had the following vaccines:

- MMR vaccine – 2 doses
- Meningococcal C (MenC) vaccine – 1 dose from 10 - <23 years of age
- Haemophilus influenzae b (Hib) vaccine – 1 dose from 1 - <10 years of age

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/globalsummary/schedules

3.6 Vaccinations in pregnancy

Pertussis vaccine Tdap (Boostrix) is recommended for all pregnant women between 27-36 weeks gestation in every pregnancy. For more details see http://www.hse.ie/eng/health/immunisation/pubinfo/pregvaccs/pertussis/

Influenza vaccine is recommended for all pregnant women at any stage of pregnancy. For more details see http://www.hse.ie/eng/health/immunisation/pubinfo/pregvaccs/Flu/

Vaccination of women who are non-immune to rubella is recommended as outlined in the Rubella chapter of the Immunisation Guidelines at http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/chapter20.pdf
3.7 Other vaccinations

General practice personnel also provide vaccinations for public health purposes. In the event of an outbreak e.g. measles or meningococcal B disease, 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 type b, pneumococcal and meningococcal disease.

For more details see the Immunisation of the Immunocompromised chapter of the Immunisation Guidelines at http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/immunisationguidelines.html

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
http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/

http://www.hse.ie/eng/health/immunisation/hcpinfo/trainingmanual

C. Immunisation training slides for Health Professionals, National Immunisation Office 2011
http://www.hse.ie/eng/health/immunisation/hcpinfo/trainingmanual

D. Summary of Product Characteristics (SmPCs) for each of the vaccines available at www.hpra.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.
Practice nurses should develop their personal understanding of the enabling Scope of Practice Framework produced by The Nursing and Midwifery Board of Ireland in 2000 available at http://www.nursingboard.ie/en/elearn-scopetopractise.aspx

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 Health Products Regulatory Authority (HPRA) (see Section 6.0).

See Appendix C for GP practice administration issues.

4.4 Administration of vaccines under individual prescription or Medication Protocol

The Nursing and Midwifery Board 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”.

The Nursing and Midwifery Board of Ireland e-learning programme “Guide to Medication Management” provides guidance for medication protocol use. Unit 6 is devoted to medication protocols and is available at http://www.nursingboard.ie/en/elearning.aspx

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 D 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 E). 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 F and see Appendix G 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 C).
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 be given to clients 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 fridge, are in date and stored in accordance with cold chain directions (see Section 8).
M. Removes vaccine from the vaccine fridge when the client is ready 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.
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 and MenC vaccines must be used within one hour of reconstitution or be discarded.**

Any vaccine which is removed from their packaging and not used should 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 Health Products Regulatory Authority/European Medicines Agency.

Additional information can be accessed through websites including [www.immunisation.ie](http://www.immunisation.ie), [www.hpra.ie](http://www.hpra.ie) and [www.medicines.ie](http://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. an unmarried father can become a joint guardian if both parents sign a statutory declaration, 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 6) which is available at http://www.hse.ie/eng/health/immunisation/hcpinfo/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</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23-25 gauge</td>
</tr>
</tbody>
</table>

*Use a 16mm length needle in infants under 2.5-3kgs.
**Use 40mm 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.healthpromotion.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 HPRA (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 Health Products Regulatory Agency (HPRA). Following licensing of vaccines or other medicines the HPRA is responsible for post marketing surveillance. Reports of adverse events are available on www.hpra.ie The HPRA 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 HPRA.

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 Director 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 H).

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, infants born on or after July 1st 2015 will receive two vaccines (6 in 1 and PCV) – these vaccines should be given in separate limbs. If three vaccines (6 in 1, PCV and MenC) are required as part of a catch up schedule, 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. When vaccines are given intramuscularly to persons with bleeding disorders or on anticoagulants, NIAC has recommended it is prudent to use a 23 gauge or wider needle to reduce the pressure gradient and cause less trauma to the tissues and to apply gentle pressure to the vaccine site for 1-2 minutes after the injections. If using a 25 gauge needle, the vaccine should be injected into the muscle over 5 seconds to reduce the risk of tissue damage.

In those with a severe bleeding tendency vaccination can be scheduled shortly after administration of clotting factor replacement or similar therapy.

Vaccines recommended for intramuscular injection may be administered subcutaneously to persons with a bleeding disorder if the immune response and clinical reaction to these vaccines are expected to be comparable by either route of injection. This only applies to MMR, influenza and yellow fever vaccines.


**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. Pertussis vaccine Tdap (Boostrix) is recommended for pregnant women between 27 and 36 weeks gestation of each 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 (<0.1 micrograms 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.

Pertussis

Low dose pertussis vaccine (Tdap) is recommended for

- Pregnant women between 27-36 weeks gestation in each pregnancy, to protect themselves and their infant. Immunisation at this time allows the greatest transfer of maternal antibodies which occurs from 34 weeks gestation thus providing protection for infants too young to be vaccinated.
- Health care workers who are in contact with infants, pregnant women and the immunocompromised.

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.

An algorithm outlining the requirement for booster doses of PPV23 is available at http://www.hse.ie/eng/health/immunisation/hcpinfo/OtherVaccines/pneumo/ppv.pdf

MMR

- MMR may be given at the same time or at any interval after or before 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 at 01 8676108 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 HPRA (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.

See Table on Minimum intervals between vaccine doses in General Immunisation procedures chapter of Immunisation Guidelines at http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/chapter2.pdf

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 HPRA (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 correct temperature range for storage, transport and maintenance of vaccine is between +2°C to +8°C. This range is important to maintain the potency and efficacy of vaccine and comply with the vaccine license.

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 fridge.
- Domestic fridges 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
- Wire the fridge directly to power supply without using a plug or if this is not possible highlight the fridge must not be unplugged

- Return all expired or damaged 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 fridge maintenance

A. The vaccine fridge should not be overfilled and the vaccine boxes should not touch the sides or back of the fridge. 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 fridge 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 fridge.

D. A temperature monitoring chart should be on each vaccine fridge door. When a temperature chart has been completed, replace it with a new chart and keep completed chart indefinitely.

E. A data logger (a battery powered continuous temperature recording device) should be used in fridges where vaccines are stored. This should be placed in the middle of the fridge adjacent to the vaccines. This device is independent of the fridge and continues to record the temperatures even when there is no power supply and therefore gives an accurate account of the temperatures reached and the duration of any temperature breach.

   The data logger should be downloaded regularly (at least once every two weeks) and the electronic or printed record should be retained indefinitely. The stored data will suffice as a permanent temperature record for the fridge.

   Once a temperature breach is registered by the fridge thermometer (current, maximum or minimum) or if the fridge has alarmed the data logger should be downloaded to ascertain the temperatures reached and the duration of the breach.

   The data logger does not replace reading the fridge thermometer twice daily.

F. It is recommended that the fridge temperature is checked twice daily i.e. current, 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).

   The maximum/minimum reading should be cleared from the fridge memory and reset after each reading. The reset has been correctly carried out correctly when the maximum, minimum and current temperature all display the same reading.

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

H. Containers of water can be placed in the fridge to help stabilise the temperature in the unit. This may arise if there is a planned power outage and the fridge is not full.

I. The electricity supply to the vaccine storage fridge should not be accidentally interrupted. This can be achieved by directly wiring the fridge to the electricity supply without using a plug. Where this is not possible arrangements should be put in place to ensure the plug is never pulled out, and the switch is never turned off (these arrangements could include difficult access to the socket e.g. behind the fridge or physical cover) or by placing cautionary notices on plugs and sockets e.g. “Don’t unplug me” stickers are available from the NIO.

J. The fridge should be kept clean and dust free at all times. The fridge seals should be regularly inspected. The seal should not be torn or brittle and there should be no gaps between the seal and the body of the unit when the door is closed.

K. The fridge should be serviced and thermometers calibrated annually. It should be regularly cleaned with a 1:10 solution of sodium hypochlorite (or dilute Milton).

L. Records of servicing and cleaning should be maintained.

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

N. Ensure that adequate insurance for vaccine damage is in place in case of fridge breakdown to allow for vaccine replacement.
REMEMBER THE 4Rs

**Read:** Twice daily readings of the fridge thermometer’s maximum, minimum and current temperatures at the same time every day during the working week.

**Record:** record fridge temperatures in a standard fashion and on a standard form stating date and time of reading and sign/initial (Appendix 1) or download data logger regularly.

**Reset:** reset the fridge thermometer after each reading and/or when temperatures have stabilised after a period of high activity.

**React:** the person making the recordings should take action if the temperature falls outside +2°C to +8°C and document this action.

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. A “vaccine stock sheet” should be kept to record the date and stock on hand and quantity ordered to facilitate monthly ordering. A minimum vaccine stock of two weeks supply but no more than six weeks should be kept. Overstocking can lead to wastage in the event of cold chain failure or due to expiry date being reached or increase the risk of administering an expired vaccine.

C. Vaccines should be ordered online at [http://ordervaccines.ie/login.aspx](http://ordervaccines.ie/login.aspx) from the HSE National Cold Chain Service (NCCS) (current contract holders are United Drug Distributors UDD).

   - E-mail vaccines@udd.ie
   - Fax number (01) 4637788

D. 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.

E. Vaccines should be ordered by a specific date each month as per a prescribed schedule from the NCCS.

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 immediately.

B. Vaccines must be placed immediately in the vaccine fridge 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. Vaccines must be removed from delivery box, checked against delivery docket, allocated to appropriate area in fridge and recorded. The delivery docket should be filed as it contains details of the delivery, batch number and expiry dates of products.

8.5 Procedure for stock rotation and disposal

A. Expiry dates of vaccines should be regularly checked and vaccine stock should be rotated so that vaccines with the shortest expiry date are closest to hand.

B. Vaccine with the shortest expiry date should be used first.

C. Expired and damaged unopened vaccines must not be used and should be removed from the fridge and returned to the NCCS driver with a completed vaccine return form. A copy of this should be retained locally. Vaccine return forms are available to download from [http://www.immunisation.ie/en/VaccineOrderingandStorage/](http://www.immunisation.ie/en/VaccineOrderingandStorage/).

D. These returns should not be kept in the fridge but should be ready to hand to the driver.
8.6 Procedure following breakdown in the “Cold Chain”

In accordance with product licence, all vaccines must be stored in a fridge 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 fridge
- Electrical power cut
- Unplugged fridge switch
- Open fridge door

Any use of the vaccine outside of the licensed storage conditions is at the doctor’s own responsibility unless the NIO, on a case by case basis has advised whether it is appropriate to use the vaccines or whether they should be discarded.

If a fridge breakdown occurs:

A. Check the temperature on the fridge thermometer (current, maximum and minimum), note the time and remove the continuous temperature recording device (data logger) to download the readings and return to fridge.

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

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

D. Record date and time of breakdown.

E. Record the type, quantity and batch numbers of vaccines in each fridge affected by the incident.

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 any vaccine and keep vaccines between +2°C to +8°C in quarantine until advised by the NIO.

H. Vaccines should be marked as recommended by NIO or those that cannot be used must be removed from the fridge, details on the returns form completed and returned to the NCCS on the next delivery day. A copy of this form should be retained locally.

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

If the fridge has electrical problems or a new fridge is required, record the temperature for 48 hours before using the fridge to store a new supply of vaccines. When a new fridge 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.

The fridge should be levelled in a way that allows the door to close automatically if left ajar.

In the event of a fridge 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

- Immunisation Guidelines for Ireland http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/
# APPENDIX A

## National Immunisation Schedule 2015

<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</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>MenC</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 2 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>Pneumococcal polysaccharide vaccine</td>
</tr>
</tbody>
</table>
APPENDIX B

Catch Up Immunisation Schedule

In the absence of reliable information/documentation to the contrary, children should be assumed to be unimmunised and started on an age appropriate catch-up programme.

If the child or adult has already received some doses of these vaccines these doses do not need to be repeated.

4 months to <12 months of age

- 1 dose of BCG
- 3 doses of 6 in 1 (DTaP/IPV/Hib/Hep B) at 2 month intervals
- 2 doses of MenC at 2 month intervals
- 2 doses of PCV at 2 month intervals

Continue with routine childhood immunisations from 12 months of age

12 months to <4 years of age

- 1 dose of BCG
- 3 doses of 6 in 1 (DTaP/IPV/Hib*/Hep B) at 2 month intervals
  * 1 dose of Hib may be given if this is the only vaccine that is required
- 1 dose of MenC
- 1 dose of PCV (omit if >2 years of age unless at increased risk)
- 1 dose of MMR

Continue with routine school immunisations from 4 years of age

  - Booster DTaP/IPV at least 6 months and preferably 3 years after the primary course
  - Second MMR at least one month after the first dose

If a child aged <18 months receives a second MMR vaccine within 3 months of the first MMR a third MMR should be given at 4 – 5 years of age

4 – <10 years of age

- 1 dose of BCG
- 3 doses of 6 in 1 (DTaP/IPV/Hib*/Hep B) at 2 month intervals
  * 1 dose of Hib may be given if this is the only vaccine that is required
- 2 doses of MMR separated by at least one month.
- 1 dose of MenC

Continue with routine school immunisations

  - Booster of DTaP/IPV at least 6 months and preferably 3 years after the primary course

10 – <18 years of age

- 1 dose of BCG (up to 15 years of age if in low risk group or 35 years of age if in specified high risk group, see Chapter 22)
- 3 doses of Tdap/IPV at 1 month intervals
- 2 doses of MMR separated by at least one month
- 1 dose of MenC (up to 23 years of age)
- Booster doses of Tdap/IPV 5 years after the primary course and Tdap 10 years later

18 years and older

- 1 dose of BCG (up to 35 years of age if in specified high risk group, see Chapter 22)
- 1 doses of Tdap/IPV followed 1 month later by 2 doses of Td/IPV at 1 month intervals
- 1 dose of MenC (up to 23 years of age)
### APPENDIX B  Continued

#### Catch-up schedule for children and adults

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>4 months to &lt;12 months</th>
<th>12 months to &lt;4 years</th>
<th>4 to &lt;10 years</th>
<th>10 to &lt;18 years</th>
<th>18 years and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose (up to 15 years of age if in low risk group or up to 35 years of age if in high risk group)</td>
<td>1 dose (up to 35 years of age if in high risk group)</td>
</tr>
<tr>
<td>6 in 1 (DTaP/IPV/Hib/Hep B)</td>
<td>3 doses 2 months apart</td>
<td>3 doses 2 months apart</td>
<td>3 doses 2 months apart</td>
<td>1 dose (if given after 10 years of age, adolescent MenC booster not required)</td>
<td>1 dose (up to 23 years of age)</td>
</tr>
<tr>
<td>Men C</td>
<td>2 doses 2 months apart</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose (up to 23 years of age)</td>
</tr>
<tr>
<td>PCV</td>
<td>2 doses 2 months apart</td>
<td>1 dose (omit if &gt;2 years of age)</td>
<td>2 doses 1 month apart</td>
<td>2 doses 1 month apart</td>
<td>2 doses 1 month apart</td>
</tr>
<tr>
<td>MMR3</td>
<td>1 dose</td>
<td>2 doses 1 month apart</td>
<td>2 doses 1 month apart</td>
<td>2 doses 1 month apart</td>
<td>2 doses 1 month apart</td>
</tr>
<tr>
<td>Tdap/IPV</td>
<td></td>
<td></td>
<td>3 doses 1 month apart</td>
<td>1 dose</td>
<td>1 dose</td>
</tr>
<tr>
<td>Td/IPV</td>
<td></td>
<td></td>
<td></td>
<td>1 month after Tdap/IPV</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE**

- **Continue with routine childhood immunisation schedule from 12 months.**
- **Continue with routine school immunisations**
  - [4 in 1 (DTaP/IPV) at least 6 months and preferably 3 years after primary course, MMR at least 1 month after previous dose]
  - [4 in 1 (DTaP/IPV) at least 6 months and preferably 3 years after primary course]
  - Boosters of Tdap/IPV 5 years after primary course and Tdap 10 years later

---

1. One dose of single Hib vaccine may be given to children over 12 months of age and up to 10 years of age if this is the only vaccine they require.
2. Unless at increased risk.
3. The second dose of MMR is recommended routinely at 4-5 years but may be administered earlier. Children vaccinated before their first birthday in the case of an outbreak should have a repeat MMR vaccination at 12 months of age, at least one month after the first vaccine with a further dose at 4-5 years of age. If a child aged <18 months receives a second MMR vaccine within 3 months of the first MMR a third MMR should be given at 4-5yrs of age.
4. For health care workers born in Ireland since 1978 or born outside Ireland; and for adults from low resource countries, without evidence of two doses of MMR vaccine.
5. Only one dose of Tdap/IPV is required due to likely previous exposure to pertussis infection.
APPENDIX C

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 I 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 D

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 The Nursing and Midwifery Board.

- The Nursing and Midwifery Board (2010) Practice Standards for Midwives: The Nursing and Midwifery Board
- The Nursing and Midwifery Board (2007) Guidance to Nurses and Midwives on Medication Management Dublin: The Nursing and Midwifery Board
- The Nursing and Midwifery Board (2002) Recording Clinical Practice. Guidance to Nurses and Midwives
- The Nursing and Midwifery Board (2000) Scope of Nursing and Midwifery Practice Framework Dublin: The Nursing and Midwifery Board
- Summary of Product Characteristics and Patient Information Leaflet as detailed by the Irish Medicines Board and available at www.hpra.ie and www.medicines.ie

The Nursing and Midwifery Board 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” (The Nursing and Midwifery Board, 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>
</tr>
</thead>
<tbody>
<tr>
<td>Date the protocol comes into effect</td>
</tr>
<tr>
<td>Date for review of protocol* (*2 years from date of production or when required if new information available)</td>
</tr>
<tr>
<td>Names and signatures of protocol authors and reviewers</td>
</tr>
<tr>
<td>Name(s) and Signature(s) of the employing authority who is authorising the implementation of the protocol</td>
</tr>
</tbody>
</table>

### 2.0 Clinical Criteria

<table>
<thead>
<tr>
<th>Clinical Condition for use of the protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circumstances in which the medication protocol applies</td>
</tr>
<tr>
<td>Inclusion criteria for patient/service user treatment using the protocol</td>
</tr>
<tr>
<td>Exclusion criteria for patient/client treatment using the medication protocol</td>
</tr>
<tr>
<td>Actions to be taken for those who are excluded from the Protocol</td>
</tr>
<tr>
<td>Precautions</td>
</tr>
<tr>
<td>Documentation required to support implementation of the medication protocol</td>
</tr>
</tbody>
</table>

### 3.0 Details of Medication to be supplied

<table>
<thead>
<tr>
<th>Name of Medication</th>
</tr>
</thead>
</table>
| Instructions for administration of the vaccine

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

<table>
<thead>
<tr>
<th>Warnings and precautions for use</th>
<th>Possible Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential adverse reactions and procedures for treatment of same</td>
<td></td>
</tr>
<tr>
<td>Procedure for reporting Adverse Drug Reactions to the Irish Medicines Board</td>
<td></td>
</tr>
<tr>
<td>Procedure for the reporting and documentation of errors and near misses involving the medication</td>
<td></td>
</tr>
<tr>
<td>Mechanisms for storage of medications and for obtaining supply</td>
<td></td>
</tr>
<tr>
<td>Resources and equipment required</td>
<td></td>
</tr>
<tr>
<td>Audit process to identify appropriate use of the protocol or unexpected outcomes</td>
<td></td>
</tr>
</tbody>
</table>

**4.0 Patient/service-user care information**

<table>
<thead>
<tr>
<th>Advice to be given to the patient/service user and/or carer before and/or after treatment</th>
<th>Provision of Patient Information Leaflet/Fact Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details of any necessary follow-up, action and referral arrangements</td>
<td></td>
</tr>
</tbody>
</table>

**5.0 Staff authorised to use protocol**

<table>
<thead>
<tr>
<th>Staff authorised to use protocol</th>
<th>Professional qualifications, training, experience and competence relevant to this medication protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Requirements for staff for continuing training and education for supplying medication using protocol</td>
</tr>
</tbody>
</table>
# APPENDIX E

## 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: Critical Element</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 Nursing and Midwifery Board guidelines:  
- The Code of Professional Conduct  
- Guidance to Nurses and Midwives on Medication Management  
- Scope of Nursing and Midwifery Practice. |  |  |  |
| 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” 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. |  |  |  |
| 1, 2, 3, 4         | I can undertake a clinical assessment of a patient within the scope of the medication protocols. |  |  |  |
| 2, 4               | I am aware of the correct dosage of each vaccine. |  |  |  |
| 1, 4               | I am aware of the correct preparation/reconstitution of vaccines. |  |  |  |
| 2, 4               | I can prepare all vaccines using aseptic technique. |  |  |  |
| 1, 2, 4            | I can follow the correct procedure for the intramuscular administration of vaccine(s). |  |  |  |
| 1, 2, 3            | I am aware of potential adverse reactions in relation to vaccination. |  |  |  |
## APPENDIX E Continued

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2, 4</td>
<td>I am aware of the procedures for treatment of adverse reactions</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>
</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>
</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>
</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>
<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>
<td></td>
<td></td>
</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 F

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 with 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 address(es), 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.
## APPENDIX G

### HSE Area Immunisation Unit Directory

<table>
<thead>
<tr>
<th>Area 1</th>
<th>Primary Care, Railway St., Navan, Co. Meath</th>
<th>Anita Reilly</th>
<th>Cavan Monaghan</th>
<th>046 9076485</th>
<th><a href="mailto:Anita.Reilly@hse.ie">Anita.Reilly@hse.ie</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunisation Department, Donegal PCCC HQ, St Joseph’s Hospital, Stranorlar, Lifford, Co. Donegal</td>
<td>Eileen Clancy</td>
<td>Donegal</td>
<td>074 9191757</td>
<td><a href="mailto:Eileen.Clancy@hse.ie">Eileen.Clancy@hse.ie</a></td>
<td></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>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area 2</th>
<th>Child Health/Immunisation Office Community Services, 25, Newcastle Rd., Galway</th>
<th>Brid O Connell</th>
<th>Galway City &amp; County</th>
<th>091 546207</th>
<th><a href="mailto:brid.oconnell1@hse.ie">brid.oconnell1@hse.ie</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Galway Roscommon PCCC, HSE – West, Roscommon Primary Care Centre, Golf Links Road, Roscommon</td>
<td>Catriona Harrington</td>
<td>Roscommon</td>
<td>090 66 37514</td>
<td><a href="mailto:catriona.harrington@hse.ie">catriona.harrington@hse.ie</a></td>
<td></td>
</tr>
<tr>
<td>Child Health/Immunisation Office, Community Services, St. Mary's Headquarters, Castlebar, Co. Mayo</td>
<td>Eleanor Loftus – S Mayo Bridie McAndrew – N Mayo Noreen Heston</td>
<td>Mayo</td>
<td>094 9042217 096 21511 094 9042518</td>
<td><a href="mailto:eleanor.loftus@hse.ie">eleanor.loftus@hse.ie</a> <a href="mailto:bridie.mcandrew@hse.ie">bridie.mcandrew@hse.ie</a> <a href="mailto:Noreen.heston@hse.ie">Noreen.heston@hse.ie</a></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area 3</th>
<th>Immunisation Office, Sandfield Centre, Ennis, Co. Clare</th>
<th>Denise Reidy</th>
<th>Clare</th>
<th>065 6868039</th>
<th><a href="mailto:Denise.Reidy@hse.ie">Denise.Reidy@hse.ie</a></th>
</tr>
</thead>
<tbody>
<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>
<td></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>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX G  Continued

#### Area 4

| Immunisation Unit, HSE – Floor 2, Mallow Primary Healthcare Centre, Gouldshill, Mallow, Co. Cork | Caroline J. Clifford | Cork City & County | 022 58780 | Caroline.J.Clifford@hse.ie |
| Immunisation Unit, Community Services, Rathass, Tralee, Co. Kerry | Catherine Kearney | Kerry | 066 7195682 | Catherine.Kearney@hse.ie |

#### Area 5

| Child Health Office, Community Care Centre, Western Rd., Clonmel, Co. Tipperary Fax No. 052 6177695 | Siobhan McCall | South Tipperary | 052 6177246 | Siobhan.McCall@hse.ie |
| Child Health Office, Community Care Centre, James’ Green, Kilkenny | Siobhan Hennessy | Carlow Kilkenny | 056 7784670 | Siobhan.T.Hennessy@hse.ie |
| Child Health Office, Community Care Offices, Georges St., Wexford | Susan O’Hara | Wexford | 053 9185749 | Susan.Ohara@hse.ie |
| Child Health Office, Community Care Centre, Cork Rd., Waterford | Caroline McGrath | Waterford | 051 842908 | Caroline.Mcgrath@hse.ie |

#### Area 6

| Immunisation Section, Glenside Rd., Wicklow | Denis Mangan | Wicklow | 0404 60672 | Denis.Mangan@hse.ie |
| HSE Immunisation Section, Tivoll Rd, Dun Laoghaire, Co. Dublin | Annette Barnes | Dublin South | 01 2365244 | Annette.Barnes@hse.ie |
| Immunisation Section, Vergemount Hall, Clonskeagh, Dublin 6 | Mary McKernan | Dublin South East | 01 2680379 | Mary.McKernan@hse.ie |
### APPENDIX G Continued

#### Area 7

<table>
<thead>
<tr>
<th>Area</th>
<th>Location</th>
<th>Contact Person</th>
<th>Contact Details</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>St Marys, Craddockstown Road, Naas, Co. Kildare</td>
<td>Tiarnan O’Briien</td>
<td>Kildare/West Wicklow</td>
<td>045 907 927 045 907 926 045 907 937</td>
</tr>
<tr>
<td></td>
<td>Immunisation Department, Elinor Lyons Building, Meath Primary Care Centre, Heytesbury Street, Dublin 8</td>
<td>Noreen Diver, Emer Gannon</td>
<td>Dublin South Central Dublin West</td>
<td>01 7077923 01 7077992 01 7077937 01 7077998</td>
</tr>
<tr>
<td></td>
<td>Immunisation Department, Tessa House, Block D, Cookstown Way, Tallaght, Dublin 24</td>
<td>David Walsh, Thomas McKeon</td>
<td>Dublin South West</td>
<td>01 4141485 01 4141482</td>
</tr>
</tbody>
</table>

#### Area 8

<table>
<thead>
<tr>
<th>Area</th>
<th>Location</th>
<th>Contact Person</th>
<th>Contact Details</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Immunisation Section, Primary Care Unit, Springfield, Mullingar, Co. Westmeath</td>
<td>Olivia Finerty</td>
<td>Westmeath</td>
<td>044 9384423</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leanne Murphy</td>
<td>Laois</td>
<td>044 9384422</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Noeleen Deegan</td>
<td>Longford</td>
<td>044 9384432</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clare Taaffe</td>
<td>Offaly</td>
<td>044 9384425</td>
</tr>
<tr>
<td></td>
<td>Primary Care, Railway St., Navan, Co. Meath</td>
<td>Anita Reilly</td>
<td>Meath Louth</td>
<td>046 9076485</td>
</tr>
</tbody>
</table>

#### Area 9

<table>
<thead>
<tr>
<th>Area</th>
<th>Location</th>
<th>Contact Person</th>
<th>Contact Details</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>HSE-Dublin North West, Units 4/5 Nexus Building, Blanchardstown Corporate Park, Ballycoolin, Dublin 15</td>
<td>Ciara Davidson, Rita Dalton</td>
<td>Dublin North West</td>
<td>01 8975140 01 8975158</td>
</tr>
<tr>
<td></td>
<td>Primary, Community and Continuing Care Directorate Ground Floor, Unit 4&amp;5 Nexus Building Block 6A Blanchardstown Corporate Park, Dublin 15</td>
<td>Rita Dalton</td>
<td>Dublin North City</td>
<td>01 8975158</td>
</tr>
<tr>
<td></td>
<td>Community Services, Cromcastle Rd, Coolock, Dublin 5</td>
<td>Debbie Keegan</td>
<td>Dublin North</td>
<td>01 8164259</td>
</tr>
</tbody>
</table>
# APPENDIX H

## 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>Dr John Cuddihy</td>
<td>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>Dr Mary T O’Mahony</td>
<td>Health Service Executive South, 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>
</tbody>
</table>

### HSE WEST

<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>Donegal/Sligo/Leitrim</td>
<td>Dr Peter Wright</td>
<td>Health Service Executive Iona House, Upper Main Street Ballyshannon Co. Donegal</td>
<td>Tel: (071) 9174750 Fax: (071) 9852901 Email: <a href="mailto:info@d.hse.ie">info@d.hse.ie</a></td>
</tr>
<tr>
<td>Limerick/Clare/North Tipperary</td>
<td>Dr Mai Mannix</td>
<td>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>Dr Diarmuid O’Donovan</td>
<td>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> HSE Dublin North East</td>
</tr>
</tbody>
</table>

### DUBLIN NORTH EAST

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

### HSE DUBLIN MID LEINSTER

<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>Laois/Offaly/Longford/ Westmeath</td>
<td>Dr Phil Jennings</td>
<td>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>Dr Margaret Fitzgerald</td>
<td>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>
Guidelines for Vaccinations in General Practice

APPENDIX I

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 **Ni** 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.
APPENDIX I  Continued

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
MenC Meningococcal C conjugate vaccine
MMR Measles, Mumps, Rubella vaccine
PCV Pneumococcal conjugate vaccine
PPV Pneumococcal polysaccharide vaccine
Tdap Tetanus, low dose diphtheria, low dose pertussis vaccine