Supporting Information for Staff
School Immunisation Programme
2019-2020 academic year
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Schools Immunisation Programme

The Schools Immunisation Programme (SIP) is developed in accordance 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, available at [http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/](http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/)

The SIP is carried out by staff from each CHO area.

The Schools Immunisation Programme is part of a national strategy to protect children from infectious diseases through vaccination. Specifically the Schools Immunisation Programme protects against the following diseases with the named vaccines:

**Junior Infants**
- Measles, mumps, rubella with MMR vaccine.
- Tetanus, diphtheria, pertussis, polio with Tdap/IPV vaccine.

**First year of second level school**
- Tetanus, diphtheria, pertussis with Tdap vaccine.
- Human papillomavirus (HPV) with HPV9 vaccine.
- Meningococcal A, C, W, and Y infection with MenACWY vaccine.

The programme aims to vaccinate on an annual basis;

- All four to five year olds with MMR and Tdap/IPV by targeting students in junior infants of primary schools and age equivalent in special schools (i.e. born between 01/09/2014 and 31/08/2015) or aged 6 years and home schooled (i.e. born between 01/09/2013 and 31/08/2014).

- All 12 to 13 year olds with Tdap, MenACWY and HPV9 by targeting students in first year in second level schools for the 2019/2020 academic year and age equivalent students born between 01/09/2006 and 31/08/2007 in special schools and home schooled students. The age cohort for special schools applies to the reported vaccine uptake. Older students who are new entrants into special schools who have never been offered these vaccinations should also be offered them.
School Immunisation Schedule and Target Cohort

The programme will be delivered in primary, second level and special schools.

All information packs for second level schools will be sent to each CHO so they can be sent as soon as the school year starts for immediate distribution to parents and legal guardians.

The target uptake for the Tdap/IPV, MMR2, MenACWY vaccine and Tdap is 95% and the target for HPV9 vaccine is 85%.

Review of data from other countries strongly suggests that provision of vaccines through school based programmes results in significantly greater uptake of vaccines. A school setting is an appropriate and safe setting to enable the vaccination of a large number of students. In some instances students may be vaccinated at HSE clinics. Students attending special schools or home schooled may be vaccinated at school or at a HSE clinic. In Donegal and Sligo/Leitrim GPs provide the MMR and Tdap/IPV vaccines to children aged four and five years.

Primary Schools

MMR and Tdap/IPV immunisation schedule for Junior Infants

- This will be provided by HSE staff through the schools. Parents may not choose to attend the GP for vaccination in areas where the programme is provided by HSE staff through the schools. In Donegal and Sligo/Leitrim GPs provide the MMR and Tdap/IPV vaccines to children aged four and five years.
- Parents should not be routinely invited to attend school vaccinations. There is no requirement to have a parent present at the time of vaccination.
- If parents have signed a valid consent form, all children should be vaccinated regardless of whether a parent is present or not. Children should be treated in the same manner regardless of whether a parent is present or not.
- Where children present for MMR vaccination in junior infants and their parents report that they had no previous dose of MMR, arrangements should be put in place to ensure that they receive a second dose at least one month later. This can be delivered through HSE clinics or GP services depending on local arrangements.
- Children born between 01/09/2014 and 01/09/2015 have been pre-registered on SIS at a generic school ready to be updated with the school they are attending. Included in their stage status record is the evidence we have from the regional system of a previous MMR and the medical record number in that system. This record can assist areas to verify if the child has previously received an MMR vaccine.
Second Level Schools

All second level schools now require 2 visits

- Visit 1: HPV9 and Tdap
- Visit 2: HPV9 and MenACWY

As per NIAC guidelines, the two doses of Gardasil 9 for those who start the vaccination series before their 15th birthday should ideally be separated by 6 to 12 months. The minimum interval between doses is 5 calendar months and the 4 day rule applies. A six month gap between doses is preferable, but the minimum interval may be used if necessary.

Additional Information resources:

- Summary of Product Characteristics (SmPCs) for each of the vaccines available at [www.hpra.ie](http://www.hpra.ie) and also available under the relevant schools vaccination programme at [http://bit.ly/SchPHCP](http://bit.ly/SchPHCP)
- Medicine Protocols for each of the vaccines in the schools immunisation programme are available under the relevant schools vaccination programme at [http://bit.ly/SchMedPros](http://bit.ly/SchMedPros)
- Each medical officer and nurse must be familiar with techniques for resuscitation of a patient with anaphylaxis and have completed a Basic Life Support training course within two years.
- HPV E-Learning Programme available on HSELand [www.hseland.ie](http://www.hseland.ie)
Useful Information before, during and after the session

Templates for Standard Operating Procedures (SOP’s) have been provided in Appendix B to document how schools based immunisation sessions should run. These can be adapted for use in local areas.

Consent

- The Guide to Professional Conduct & Ethics for Registered Medical Practitioners, 8th Edition, 2016 (Medical Council) states in section 11.1 that:
  - “(You must) give patients enough information, in a way that they can understand, to enable them to exercise their right to make informed decisions about their care.

- Consent is not valid if the patient has not been given enough information to make a decision” See [http://bit.ly/MC8thEd](http://bit.ly/MC8thEd)

- Informed consent must be obtained prior to vaccination. In the case of the HPV vaccine, consent is given to a course of vaccination, therefore it covers all doses necessary to complete a course and consent remains valid until the course has been completed or unless consent is withdrawn by a parent, legal guardian or student aged 16 years or older.

- 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/legal guardian. Students 16 years and older can consent on their own behalf.

- Under The 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. In this circumstance, fathers may also become the legal guardian under some conditions (see HSE consent policy). Under certain circumstances guardianship of the child may be changed e.g. if one parent dies the remaining parent will automatically assume sole guardianship of the child or another guardian can also be appointed by the court.

- 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.

- Consent remains valid unless consent is withdrawn by a parent, legal guardian or student aged 16 years or older.

- If a parent/legal guardian contacts the local health office to withdraw consent they should speak to the staff member, ideally a clinical staff member looking after the vaccine programme.

- The necessary information can be taken and the required changes made to the consent form – a double line should be drawn through the vaccine administration details section with the words ‘refused dose’ with the date and time and PIN of the person taking the information down.

When vaccination is delayed or refused

Junior Infants- MMR and 4 in 1 vaccines

These children can be recalled to a mop-up clinic or referred to their GP.

Students in First year of second level school or age equivalent at special school (2019-2020)

Universal HPV programme - Students in first year of second level school are eligible for the universal HPV 9 vaccine programme. There is no catch-up programme agreed for this cohort and therefore it is only available to them in first year of second level school. They will not be able to opt back into the programme in a later school year if they have refused consent in first year.

Men ACWY and Tdap programme - Only children who miss this in first year for medical or other exceptional circumstances can be offered these in mop-up clinics in later years.

Students in second to sixth year of second level school or age equivalent at special school (2019-2020)

Girls only HPV4 programme - Girls older than first year, but still in school are still eligible for the girls only HPV4 vaccine programme in academic year 2019-2020, if they previously refused the vaccine or need to complete the vaccine course. They or their parents/guardians must request this from the school health team, it will not be offered routinely if they have previously refused consent. They should be given the HPV4 vaccine while stocks are available and can start or complete with HPV9 only when stocks of HPV4 are no longer available. Those who have completed a course with HPV4 are not eligible to be vaccinated with HPV9 as part of the schools programme.

Men C and Tdap vaccine programme - Only children who missed these vaccines in first year for medical or other exceptional circumstances can be offered these vaccines in mop-up clinics. Men C vaccine should be offered if supplies are still available locally, otherwise Men ACWY can be offered.

Assessment of the student for vaccination

Before assessing the suitability of a student for vaccination:

- Confirm student’s identity (Confirm name, address, date of birth and parent or legal guardian’s name by asking: “What is your full name? When is your Birthday? Where do you live? Who signed the consent form? What is their name?” For younger children it may be necessary to confirm identity with the child’s teacher or an appropriate liaison person (as agreed with the School Principal) from the school.
- Confirm that informed consent has been given by a parent/legal guardian/student aged 16 years and older.
- Address any clinical issues raised on the consent form.
• Check that any interval between vaccinations is appropriate.
• For HPV9 vaccine check that the interval since the previous HPV9 vaccine is appropriate for this dose i.e. for 2nd dose it is at least 5 calendar months since 1st dose (the 4 day rule applies).

Access to a calendar is recommended.

NIAC guidelines state 'If a vaccine is given before the minimum age or interval recommended, it should not be considered as part of the primary series as there may be a sub-optimal immune response. The dose should be disregarded and another dose given at the recommended time…. However, giving a dose 4 days or less before the minimum age or interval is unlikely to have a significant adverse effect on the immune response to that dose, and does not need to be repeated' see http://bit.ly/NIACCh2

If the second dose of HPV9 is given too early in a student who started the course before the age of 15 years, NIAC guidelines state- If the second dose is given <5 months after the first dose, a third dose should always be administered. This should be given 6–12 months after the first dose and at least 12 weeks after the second dose.

If a dose of HPV is given too early and the student needs to be revaccinated an additional consent form must be completed. Please contact the NIO for a copy of the dose 3 consent form. The additional consent and vaccination information must be recorded on SIS.

• Vaccines should only be given to students who are well on the day, and for whom no contraindication is identified as per the Immunisation Guidelines of Ireland available at http://bit.ly/NIACGuidelines

The student’s temperature should not be checked routinely in the school at the time as this is not conclusive and is therefore unhelpful in the decision-making process.

Any student feeling unwell on the day, or considered by the medical officer to require deferral of the vaccine, should be offered an appointment for the mop-up clinic.

**Administration of two vaccines at the same vaccination session**

• When two vaccines are being administered, one vaccinator should where possible administer both vaccines.
• Where there are two vaccines to be administered to students at the same vaccination session, each vaccine should be kept in a separate colour coded container.
• When two vaccines are administered at the same vaccination session it is useful to follow an agreed convention 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. It is also easier
to enter this information uniformly into the electronic record.

- Junior infants should be given MMR in the right deltoid and Tdap/IPV in the left deltoid.
- Second level students should be given the first dose of HPV9 vaccine in the left deltoid and Tdap in the right deltoid.
- The second dose of HPV9 vaccine is given in the left deltoid and MenACWY is given in the right deltoid.

- Where two vaccines are scheduled for students at the same vaccination session but a student is only getting one of these vaccines the following should be done:
  - The vaccinator should draw a double line through the box where vaccination details are entered and write “NOT FOR VACCINATION” between the double lines.
  - The vaccinator should double check the required vaccine with a nurse/medical colleague before administering the vaccine.

### Vaccine storage and handling

- All vaccines must be stored and transported between +2°C and +8°C.
- The SmPCs for Gardasil9, Boostrix, Priorix, MMRVaxPro, Nimenrix and IPV Boostrix all recommend that the vaccine should be stored in the original package to protect from light.
- SmPC for Adrenaline BP 1:1,000 advises that it should not be stored above 25°C and it should be kept in the outer carton.
- See Appendix K for additional information about maintaining the cold chain.
- Record the current temperature of the probe in the cool box:
  - Before leaving the health centre.
  - At the beginning of the vaccination session.
  - At the end of the vaccination session.
  - On returning the vaccines to the fridge.
- Ensure that the cool box is placed in,
  - An appropriately ventilated room,
  - Away from any heat source,
  - Away from direct sunlight.
  - Ensure that the cool box remains closed as much as possible.
  - Ensure that where vaccines are not used on a particular day and are in their original packaging and have been maintained under cold chain conditions, these vaccines may be returned to the vaccine fridge. They should be clearly marked so that they are used first at the next vaccinating session. The temperature of the vaccine being returned to the vaccine fridge should be recorded as well as the time of return to the fridge.
  - If these marked vaccines are taken to a second vaccination session and are not used providing the cold chain has been maintained these vaccines can be returned to the vaccine fridge again, for administration at the next session. These marks should differ from the
marks used during a cold chain breach. Vaccines which have remained in temperature at all times and have not been used after 1 or 2 transportations to school have not experienced a cold chain breach. However, it is important not to take more vaccines than will be required to a vaccination session so the return of vaccines without being used more than twice should be exceptional.

- If a temperature deviation has occurred, contact the Chief Pharmacist or the Medical Officer of the National Immunisation Office (at 087 9915452 or 01 8676108) for further advice. The National Immunisation Office will carry out a risk assessment and will advise on a case by case basis whether it is appropriate to use the vaccines later or whether they should be discarded.
- Any vaccine that has been removed from its packaging and is not used in a timely manner within the session should not be returned to the cool box but should be discarded safely into a sharps bin.
- MMR vaccines must be used within one hour of reconstitution or discarded safely into a sharps bin. It is not appropriate to return reconstituted MMR vaccine to the cool box. Reconstituted Nimenrix should be used promptly and must be discarded if reconstituted but not used after 8 hours. It is not appropriate to return reconstituted Nimenrix vaccine to the cold box.
- Once Tdap/IPV, Tdap, and HPV9 which come in prefilled syringes are removed from their packaging they should be used at that vaccination session or discarded safely into a sharps bin. The SmPC states all vaccines should be kept in their original packaging to protect from light. All prefilled vaccine syringes which have been removed from their packaging should not be returned to the cool box.

Do not use or dispose of any vaccine which has been exposed to temperatures outside the permitted range. Quarantine and maintain these vaccines between +2oC and +8oC until advised by the National Immunisation Office.

HSE Paper Records

- Information on the Consent form must be put into SIS as soon as possible after the vaccine is given.
- Where a second vaccination is required, the first vaccine record must be put into SIS as soon as possible after the first vaccine is given. Please do not wait until the second vaccine is given.
- Consent forms for students who have been vaccinated but require further doses to complete a course should be set aside for the next school clinic.
- Consent forms for students whose vaccination is deferred or who are absent on the day should be put aside for the next mop-up clinic.
- Students who fail to return a completed consent form should also be offered an appointment at
a mop up clinic if they can be identified from the school list or staff.

- When students have completed the vaccination course their records should be filed in accordance with the “Policy for Health Boards on Record Retention Periods including outline of issues in records management / National Freedom of Information Liaison Group” 1999 available at http://bit.ly/RetRec

- All clinical notes on events around vaccination should be stored with the consent form. Ensure that all information recorded is in black ink, in block capitals and is clear and legible and also recorded on SIS as appropriate.

- If the parent/legal guardian requests further clinical advice about the vaccine they can be referred to a clinical member of the vaccination team.
  - If a parent consents but the student refuses vaccination on the day of the session, the student should not be vaccinated. This must be recorded on the consent form and on SIS.
  - If a parent refuses but the student expresses a desire to be vaccinated on the day of the session, the student may be vaccinated if they are aged 16 years and over. If the student is less than 16 years of age they cannot be vaccinated.

- If vaccines are refused, the date of refusal and PIN of the person writing the refusal should be added to the form and entered onto SIS. Please record a reason if stated.

- Where parents/legal guardians have refused consent for vaccination, the reason for refusal should be reviewed by a clinical member of the vaccination team. If there is a clear refusal, parents/legal guardians should not be contacted.

- Where a consent form is returned a parent/legal guardian leaves the consent blank or only fills in the Yes/No sections, a clinical member of the team should phone parent/legal guardian to seek clarification about their consent. The date and time of the phone call should be recorded on the consent form and the clinician’s PIN, consent or refusal witnessed by two members of staff.

**Interrupted immunisation schedule**

“If an immunisation course is interrupted, it should be resumed as soon as possible. It is not necessary to repeat the course, regardless of the time interval from the previous incomplete course*. The course should be completed with the same brand of vaccine if possible.


**Incomplete immunisation schedule**

Where children are identified as having had no previous immunisations or an incomplete primary course, vaccines should be given on the day and arrangements should be made to ensure completion of appropriate vaccination in line with the guidance for “catch up immunisation schedule” available at [http://bit.ly/LateEntrant](http://bit.ly/LateEntrant)
Contraindications to vaccination

- Confirmed anaphylactic reaction to the vaccine itself or to a constituent of that vaccine is an absolute contraindication.
- Pregnancy in the case of HPV and MMR vaccines.

Pregnancy and HPV vaccine

Pregnancy could be an issue for some female students in second level schools. Parent(s) are advised to discuss the possibility of pregnancy with their daughter prior to vaccination. The HPV vaccine consent form includes the statement "I understand that HPV is not recommended in pregnancy" ([Appendix D](#)). If the parent(s) indicate that their daughter is pregnant then vaccination should be withheld. If the consent form is signed then vaccination is appropriate. Questioning the girl about her last menstrual period is not indicated. Before the second dose of Gardasil is given the vaccinator should ask the girl the following questions:

- Have you read on the consent form where it says that vaccination is NOT recommended in pregnancy?
- This means that if you think there is any possibility you might be pregnant then you should not be vaccinated today.
- Do you understand this? OR Are you clear about this?
- Do you want to ask me anything more about this before I prescribe the vaccine for you? OR a similar question to check that it is ok to proceed.

If there is any possibility of pregnancy vaccination should be postponed.

Where there is a possibility of pregnancy and the female student is aged under 17 years of age inform the parents, on the vaccination day, that vaccination has been deferred and the reason for deferral. The parents should be notified that vaccination is not being carried out as they have given consent for it. This decision should be discussed with the student prior to contacting the parents. The medical officer or nurse should notify their line manager and seek further advice in relation to their legal obligations under child protection legislation. For further detail, see [http://bit.ly/C1stTusla](http://bit.ly/C1stTusla).

However, if the girl is adamant that her parents are not to be informed as to the reason for deferral the medical officer or nurse should again notify their line manager and seek further advice in relation to
their legal obligations under child protection legislation. For further detail, see http://bit.ly/C1stTusla

If a girl who was vaccinated subsequently finds out that she was pregnant at or conceived around the time of vaccination, any further HPV vaccination should be postponed. Reports of pregnancy occurring in association with HPV vaccination should only be reported to the HPRA if there is harm to the patient or foetus/infant/child (Appendix I). This means that the outcome of pregnancy should be followed up with the girl when completing her course of HPV vaccine or when the pregnancy is completed. If further vaccines are required then vaccination may be given when the pregnancy is completed.

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) or wider needle to reduce the pressure gradient and cause less trauma to the tissues. Apply gentle pressure to the vaccine site for 1-2 minutes after the injections. In those with a severe bleeding tendency vaccination can be scheduled shortly after administration of clotting factor replacement or similar therapy.
- MMR vaccine can be given by the subcutaneous route. Administration by the subcutaneous route may be considered in those with severe bleeding disorders. However, immunogenicity of vaccines recommended for IM administration may not be as long lasting if they are given subcutaneously, except MMR which can be given SC. The patient or parent should be advised of this.
- There is no recommendation on the subcutaneous administration of the Tdap/IPV, Tdap, MenACWY or HPV9 vaccine.
- **Immunosuppression:** The immune response of individuals who are immunocompromised may be inadequate.
- In the case of MMR vaccine for those who have immune deficiency or immunosuppression please refer to the detailed guidance in Chapter 3 on Immunisation of Immunocompromised Persons in Immunisation Guidelines http://bit.ly/NIACGuidelines
- Individuals with impaired immune responsiveness, whether due to treatment, illness or other causes may not respond to the HPV vaccine. See HPV chapter and Chapter 3 in the Immunisation Guidelines for Ireland available at http://bit.ly/NIACGuidelines

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<tr>
<th>All vaccines (live and non-live) can safely be given to patients being treated with topical calcineural inhibitors (e.g. tacrolimus).</th>
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<td>None of the vaccines used in the school immunisation programme contain latex.</td>
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Information on specific vaccines

All pertussis containing vaccines
The following are not contraindications or precautions to giving pertussis containing vaccines. They have not been shown to cause permanent harm and are significantly less common after acellular than after whole cell pertussis vaccine

- Temperature of more than 40.5°C within 48 hours of a previous dose of a pertussis containing vaccine
- Hypotonic hyporesponsive episode within 48 hours of a previous dose of a pertussis containing vaccine
- Seizures within 72 hours of a previous dose of a pertussis containing vaccine. Persistent, inconsolable crying lasting more than 3hrs within 48 hours of a previous dose of a pertussis-containing vaccine.

Junior Infants
Tdap/IPV
- There should be an interval of at least six months between the booster dose of Tdap/IPV and the completion of a primary course of tetanus containing vaccine.
- Tdap/IPV can be given at any interval following Td vaccine.

MMR
- Vaccination should be deferred for between three and eleven months following the administration of an antibody product (for full details see Table 2.4 in Chapter 2 of Immunisation Guidelines for Ireland available at [http://bit.ly/NIACGuidelines](http://bit.ly/NIACGuidelines))
- MMR is a live vaccine and must not be administered within four weeks of varicella, zoster or yellow fever live vaccines. MMR can be given on the same day or at any interval before or after any other live vaccine.
- **MMR and Chickenpox:** if there are cases of chickenpox in the school, the MMR vaccine can be given at any time provided the child does not have an acute febrile illness.
- MMR is contraindicated in significantly immunocompromised persons due to disease or treatment.

1st Years
- Fainting is a recognised side effect of vaccines given in adolescence.

Tdap
- Tdap can be given at any time interval after a tetanus containing vaccine.
MenACWY

- Those who have had a dose of Men ACWY conjugate vaccine at the age of 10 years or older do not require a further dose of vaccine. If they have received the polysaccharide Men ACWY vaccine, they should receive the conjugate vaccine in the schools programme.

- For anyone who has received a dose of Men C vaccine (e.g. as part of an outbreak response or because they received Men C in first year and are now repeating first year) an interval of at least two months should be left before Men ACWY vaccine is given.

- Parents or students do not need to be questioned about prior Men C or Men ACWY vaccines, but the above information on intervals should be used if a parent has indicated that the student has recently received a meningococcal C or ACWY vaccine.

When there are doubts about giving a vaccine contact a Principal Medical Officer, a Specialist in Public Health Medicine or NIO for further advice.

Adverse Events

The vaccines used in the Schools Immunisation Programme are considered safe and well tolerated. Full details of the side effects of each vaccine can be found in the summary of product characteristics (SmPC) available on www.hpra.ie.

General side effects

These can occur with any of the vaccines used in the Schools Immunisation Programme.

- A local reaction at the injection site which can consist of redness, swelling, pain and increased skin temperature is the most common side effect.

- Systemic symptoms, e.g. fever and malaise.

- Syncope can occur after vaccination, especially in adolescents.

- Anaphylaxis is an extremely rare event (about one event/million doses) that could occur with the administration of any vaccine. Detailed advice on the management of anaphylaxis is contained in the Immunisation Guidelines for Ireland. http://bit.ly/NIACAnA

- Persons who are taking beta-blockers may be vaccinated in the community. In the event of anaphylaxis or suspected anaphylaxis, epinephrine (adrenaline) should be given promptly and repeated as indicated. As with any episode of anaphylaxis, the patient should be transferred to hospital as soon as possible.

Tdap/IPV and Tdap specific side effects

- Booster doses of tetanus, diphtheria and pertussis containing vaccines can result in an increase in local reactogenicity and fever compared to the primary course i.e. extensive swelling of vaccinated limb (sometimes involving the adjacent joint);

- In general these reactions begin within 48 hours of vaccination and resolve spontaneously over an
average of 4 days without sequelae.

- Such reactions do not contraindicate further doses of diphtheria, tetanus, or pertussis containing vaccines however they should not be given further routine or emergency booster doses of tetanus or diphtheria containing vaccines more frequently than every 10 years
- Antibiotic treatment or the use of anti-inflammatory medication does not reduce the duration or severity of such reactions.
- Parents of children who receive the booster dose of a Tdap/IPV containing vaccine should be informed of the risk of extensive swelling, highlighting that this is not usually associated with significant pain or limitation of movement.

**MMR specific side effects**

- Mini measles (fever and rash) can occur 6-10 days post vaccination. This is non-infectious and self-limiting.
- Swelling of the salivary glands “mini mumps” can also occur three weeks post vaccination. This is non-infectious.
- A very rare side effect of MMR is the occurrence of thrombocytopoenia 15-35 days post vaccination.

The relevant immunisation leaflets contain details on adverse reactions and their management.

Parents/legal guardians/students should inform the school immunisation team of any adverse reactions to the vaccine by contacting the HSE area office.

**Reporting of adverse reactions**

The medical officers/vaccinators should report all suspected adverse reactions to the HPRA. Details of adverse events may be recorded on the adverse event clinical record (**Appendix H**).

When reporting suspected adverse reactions to the HPRA, details of the brand name and batch number of the vaccine should be included in the report. An adverse reaction report form can be accessed by:

3. By using the traditional “yellow card” report which can be requested in bulk from the HPRA. The “yellow card” also utilises the free post system.
4. By telephoning the HPRA Pharmacovigilance Section 01-6764971.
Children who develop reactions in the days after vaccination do not need to be seen by the Medical Officer unless in exceptional circumstances. There is no evidence to date that any of the vaccines used in the school immunisation programme cause long-term adverse events.

**Incident reporting**

In the event of an incident occurring during a vaccination session, an incident report must be completed by the professional primarily involved in the incident and forwarded to the relevant manager. If there is a vaccine error, e.g. an incorrect vaccine is administered to one or more students, the National Immunisation Office must also be informed.

References

- Guidance for providers of health and social care services Communicating in plain English HIQA and NALA 2015 www.hiqa.ie
- HSE Guidelines for maintaining the vaccine cold-chain including maintenance of vaccine fridges and management of vaccine stock http://bit.ly/SOP01
- Patient Information Leaflet (PIL) for the vaccines used in the Schools Immunisation Programme
  - IPVBoostrix PIL http://bit.ly/PIL4in1
- Information on HSE’s open disclosure policy http://bit.ly/OpenDis
- Data protection Commission website www.dataprotection.ie
- Information on Subject Access Requests (SAR) http://bit.ly/SARhse

For other useful links and resources (Appendix L)
Glossary of Terms and Definitions

**A Registered Nurse Prescriber** is a nurse or midwife who is registered in the Division of the Register of Registered Nurse Prescribers of the Nursing and Midwifery Board of Ireland (An Bord Altranais, 2007). The Registered Nurse Prescriber will use prescriptive authority in a safe and effective manner in the prescribing of vaccinations in accordance with his/her collaborative practice agreement (CPA) and must adhere to the National Policy for Nurse and Midwife Medicinal Product Prescribing (2012).

**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).

**Collaborating Medical Practitioner(s):** the medical practitioner or group of medical practitioners with whom the registered nurse prescriber has a written collaborative practice agreement as part of the requirements to prescribe medicinal products within his/her scope of practice.

**Collaborative Practice Agreement (CPA):** the CPA is drawn up with the agreement of the registered nurse prescriber, collaborating medical practitioner and the employer outlining the parameters of the registered nurse prescriber’s prescriptive authority (i.e. his/her scope of practice). The principles of professional accountability, responsibility, competence and clinical governance underpin the CPA. The medicinal products listing is approved by the Drugs and Therapeutics Committee and authorised by the director of nursing/ midwifery/public health nursing or relevant nurse/midwife manager on behalf of the health service provider (An Bord Altranais, 2012).

**Health Protection Surveillance Centre (HPSC):** the HPSC are responsible for collating, analysing and publishing the national immunisation uptake statistics for all national immunisation programmes in Ireland.

**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.

**Medicine protocols** are written directions that allow for the supply and administration of a named medicinal product by a nurse or midwife in identified clinical situations without the requirement for individual prescription.
School Immunisation Team: The multidisciplinary team of staff who provide the Schools Immunisation Programme, composition can vary between local areas.

School Immunisation System (SIS): All vaccinations administered through the Schools Immunisation Programme must be recorded on the School Immunisation System (SIS). The system is web-based and is accessible from any HSE location. Statistical reports are also generated from SIS allowing local areas to monitor their uptake and target those who are due and overdue vaccinations.

SmPC: The Summary of Product Characteristics (SmPC) of a medicine provides specific product information for prescribers and healthcare professionals on how to use that medicine safely and effectively. The content of a SmPC is agreed between the manufacturer and the relevant licensing authority during the licensing process. Any update to the SmPC must be approved by the licensing authority. The date of the most recent revision is included at the end of the text. The SmPC has an agreed standard template; the same format of SmPC is applicable in all European Union member states.

School Roll Number: The unique identifier number given to each school by the Department of Education and Skills (DES). If the school is not registered with the DES it will be assigned a unique HSE ID on the Schools Information System (SIS) system.

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 non-live micro-organisms or fractions thereof, administered to induce immunity and thereby prevent infectious disease. Non live vaccine is a vaccine that contains killed or fractions of 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 non-live vaccines.

Vaccine abbreviations:
- Tdap/IPV: Tetanus, low dose diphtheria, low dose pertussis and inactivated polio
- MMR: Measles, Mumps and Rubella
- HPV: Human papillomavirus
- MenACWY: Meningococcal ACWY
- Tdap: Tetanus, low dose diphtheria and low dose pertussis

Vaccination is the term used to refer to the administration of any vaccine or toxoid.
Appendix A: Packshots of vaccines used in school immunisation programme

Primary School Vaccines

IPV-BOOSTRIX (Tdap/IPV)

![IPV-Boostrix packshot](image1)

MMRVAXPRO (MMR)

![MMRVaxPro packshot](image2)
PRIORIX (MMR)

Second Level School Vaccines

BOOSTRIX (Tdap)
GARDASIL 9(HPV)

NIMENRIX (MenACWY)
Appendix B Template Operating Procedures and roles and responsibilities

Operational aspects of the programme prior to the school vaccination session

- Prior to the vaccination date all queries should be dealt with so no child attends for vaccination with an outstanding query. A system should be available locally to deal with immunisation queries or concerns from parents/legal guardians/students and schools.
- The target cohorts (denominator) for each vaccination programme should be identified.
- The schedule of school visits by the immunisation team(s) should ideally be decided with the schools a minimum of one month in advance if possible.
- Parents/legal guardian/students should receive the junior infant or first year of second level parent pack through the schools in advance of the planned vaccination session in the school. The pack contains a letter, information leaflets and consent form.
- For home schooled students parents/legal guardians/students should receive an information pack consisting of
  - Letter advising how to access the schools immunisation programme.
  - Information leaflet on the relevant vaccine(s).
  - Appropriate vaccination consent form

Students being home schooled are required to register with TUSLA, however registration is not required before age 6 years or after age 18 years. The cover letter advises parents/legal guardians/students to contact immunisation staff at their HSE Area to arrange vaccination. When parent/legal guardian/student contacts their HSE Area they should be given an appointment to attend a school clinic or mop up clinic. [http://bit.ly/ConCQs](http://bit.ly/ConCQs)

For 2019-2020 the NIO will be sending the letters and packs to home schooled children to TUSLA for onward dissemination to parents whose children are home schooled in the cohort. TUSLA will ask parents if they consent to their information being shared with the HSE for vaccination purposes. For any parents who consent to the HSE receiving their details the NIO will register these children on the Schools Immunisation System (SIS) so local areas will be able to run a report on those home schooled in their area and can make contact by letter with the parents if they do not contact the team to arrange an appointment.

- The composition of immunisation teams should be agreed locally in advance and will depend on the number of students in the relevant class in the school.
- Vaccines may be given by medical officers and nurses. Nurses may administer vaccine under doctor or Registered Nurse Practitioner prescription or under a medicine protocol within their scope of practice.

All staff should be familiar with the following documents:

• Summary of Product Characteristics (SmPCs) for each of the vaccines available at www.hpra.ie and also available under the relevant schools vaccination programme at http://bit.ly/SchPHCP

• Medicine Protocols for each of the vaccines in the schools immunisation programme are available under the relevant schools vaccination programme at http://bit.ly/SchMedPros

• Healthcare professionals FAQs are available at http://bit.ly/FAQImm and also available under the relevant schools vaccination programme at http://bit.ly/FAQImm

• Each medical officer and nurse must be familiar with techniques for resuscitation of a patient with anaphylaxis and have completed a Basic Life Support training course within two years.


• Each medical officer and nurse should be familiar with the medicine protocols for nurse administration of the relevant vaccines and epinephrine/adrenaline, without individual prescription.


**Operational aspects of the programme on the day of the school vaccination session**

• The team should be at the school in advance of the vaccination session to ensure that it commences promptly at the appointed time.

• Each member of the team has a responsibility to ensure the smooth through-flow and safety of students and staff at all times.

• A designated person will take responsibility for ensuring that all necessary documentation and information materials are available for the vaccination session.

• A designated person will take responsibility for ensuring that all the equipment necessary for the administration of the vaccines is in compliance with best practice.

• A designated person must take responsibility for ensuring that the correct and appropriate vaccines for primary and second level schools have been brought to the school vaccination session (Appendix A).

• A designated person will ensure that sufficient vaccine, for each of the two or three vaccines in the vaccination programme is brought to each vaccination session and that vaccines are in date and stored and maintained within cold chain

• A designated person will take responsibility for bringing the resuscitation kit to the schools and for ensuring that all the necessary resuscitation equipment and drugs are available and in date (Appendix J). These should be checked by two clinical members of the team and recorded on the vaccination session report form at the start of each vaccination session.

• Before the vaccination session begins the staff at the session must agree who is to take the “lead role” for the vaccination session and have an overall oversight for the operation of the vaccination session. This oversight role will not diminish the roles and responsibilities of all team members. The “lead role” may be assigned in advance, however if this person is absent or delayed another person
must take on this oversight role.

The person in the “lead role” will be responsible for:

- liaison with school staff
- calling “Time Out” to check all is in order before vaccinations begin
- ensuring all designated roles are covered
- ensuring the session report form is completed at the end of the vaccination session, including the lead person’s name and PIN
- ensuring that the Chief Pharmacist or Senior Medical Officer in the National Immunisation Office is contacted (at 087 9915452 or 01 8676108) if there is a break in the cold chain
- ensuring that an incident report is made if there is an incident at the vaccination session.

- At the beginning of each vaccination session two vaccinators from the team should verify the identity, expiry dates and batch numbers of the vaccine for use on the day, and record it on the school vaccination session report form.
- The current temperature of the probe in the cool boxes at the beginning and end of the vaccination session should be recorded on the school vaccination session report form.
- The person in “lead role” should call a “Time Out” to check all is in order before vaccinations begin.
- The person in “lead role” should also call “Time Out” where there is any change to the established routine/flow of the immunisation session/clinic for any reason and ensure that all team members are aware of the change
- Where there are two vaccines to be administered to the students at the same vaccination session, each vaccine should be kept in a separate colour coded container.
- Ensure the student’s immunisation passport is completed and given to all students before they leave the vaccination area (Tdap/IPV and MMR).
- The immunisation passport is retained by the HSE after the first dose of HPV9 and Tdap vaccine and is given to first year students after their second HPV9 and Men ACWY vaccine.
- Ensure that each student is provided with the appropriate tear pad stating date and time vaccine was given and the appropriate contact details so that parents/legal guardians can inform the school immunisation staff about any concerns following vaccination.
- At the end of the vaccination session the school vaccination session report form should be completed by a designated person. (Appendix F).
- All members of the Team should be responsible for cleaning/tidying up after the vaccination session so as to ensure that the vaccination venue is left as it was found.
- A medical practitioner and a nurse must remain at the vaccination venue for at least 30 minutes following the last vaccination.
Details of students who failed to return a consent form, did not provide valid consent, were absent, refused vaccination on the day or whose vaccination was deferred should be entered on SIS and put aside so they can be given an appointment to attend a HSE mop up clinic.

If addresses are available send letters to parents/legal guardians of these students by post. If addresses are not available give letters to school for onward distribution to parents/legal guardians of these students.

In addition where a completed consent form is provided too late for the school vaccination session, the student should be called to a mop up clinic.

Consent forms for those students who require further vaccine doses to complete a course should be put aside for the next vaccination session after the information is entered onto SIS.

Operational aspects after school/clinic vaccination session

- A designated member of the team is responsible for returning any unused vaccine to the fridge. Vaccines that are not used on a particular day and are in their original packaging and have been maintained under cold chain conditions should be returned to the vaccine fridge. They should be clearly marked so that they are used first at the next vaccination session.

- Arrangements should be made for a second dose of MMR to be given to those students in junior infants whose school vaccination constituted their first dose of MMR. The information from regional PCI systems will be on SIS in the Stage Status box for students born 1/9/2014-1/9/2015.

- Students who are identified as having no previous vaccines or an incomplete course should have arrangements made to complete their immunisations as per guidance for late entrants available at [http://bit.ly/LateEntrant](http://bit.ly/LateEntrant).

- Lists of students for mop-up clinics should be compiled to include all those students who were not vaccinated on the day i.e. who failed to return a consent form, did not provide valid consent, were absent or deferred on the day and those students who refused vaccination on the day.

- Client set up, consent and vaccination/DNA recording on SIS should take place as close to the vaccination event as possible at the latest within a month of the vaccination administration.

- Any suspected adverse events that occur during the school vaccination session or are subsequently notified by parents, legal guardians or students should be reported to the HPRA as appropriate.

Roles and Responsibilities

Roles and responsibilities may be assigned to team members on a local basis according to the professional qualifications and expertise of team members and available resources.

Managerial role and responsibilities

- Principal Medical Officers should ensure that all medical officers in the Schools Immunisation Programme are aware of this Supporting Information for Staff and should facilitate any training required.

- Directors of Public Health Nursing should ensure that all nurses in the Schools Immunisation
Programme are aware of this Supporting Information for staff and should facilitate any training required.

- Area Managers should ensure that all administrative staff in the Schools Immunisation Programme are aware of these guidelines and should facilitate any training required, SIS training is available from the SIS National Administrator: email SIS.support@hse.ie

- Reporting relationships and training for any non-HSE staff involved in the programme will need to be defined in advance of the start of the programme.

- SIS National Administrator is responsible for running the monthly uptake reports, maintaining the system lookup tables, reviewing user access controls, providing training / training materials and devising data quality reporting.

- CHO Administrators are responsible for overseeing the access, administrative processes, use of the system and quality of the data entered on to the SIS. It is important that medical records are controlled to ensure vaccination records are entered in a timely fashion and only once; and that the records are stored in accordance with local and national policies.

- In the 2019/2020 academic year, denominators have been brought forward from the previous year to allow reports to run to show uptake figures. When confirmed school denominators become available from the Department of Education these will also be uploaded to SIS. CHO administrators may submit a list of schools including any denominator change and an explanation of each change towards the end of the academic year to the SIS National Administrator.

CHO Administrators are responsible for managing data quality issues in school teams as they arise.

**Administrative role and responsibilities**

- Each clerical officer should report to their relevant line manager.

- Each clerical officer should ensure that they are familiar with and adhering to the relevant practices as set out in this document and the SIS user guide (mail sis.support@hse.ie).

- Each clerical officer should read and make available as needed the Statement of Information Practices for SIS and be familiar with and adhere to the Data Protection legislation.

- Ensure a copy of school health and safety regulations is obtained and adhered to during each school visit.

- Make their CHO administrator aware of any differences between the school denominator and the Department of Education’s published denominator, this may involve contacting each school to get their target cohort (denominator).

- Ensure special schools are aware of relevant birth cohort.

- Schedule vaccination date/s with each school and distribute consent packs /forms (Appendix D), information leaflets and invitation letters to all parents/legal guardians through the school as far in advance of the vaccination date/s as possible.

- Collect completed consent forms from the school as agreed with Principal or other person designated by the school principal prior to the school vaccination day and bring the relevant forms to the school on the day of vaccination.
o Collect any additional consent forms that are returned on the day of vaccination.

- Check with the school those who are in the target group but are absent on the day and put aside their consent forms. Record the students in the target group, who are present, on the class lists (if lists are available on the day).

- Check all consent forms (see pages 12-19) and contact parents or ask second level students themselves to resolve any administrative queries. Where there are also clinical queries to be resolved, all queries for that student should be referred to a clinical member of the team for follow up, to make one call to parents.

- Organise the collection and return of students to their classrooms in small groups in association with a designated school liaison person.

- Confirm student’s identity (confirm name, address, date of birth and guardian’s name by asking: “What is your full name? When is your Birthday? Who signed the consent form? What is their name?” For younger children it may be necessary to confirm identity with appropriate liaison person from the school.

- Give consent forms to students after confirming their identity.

- Direct student to the Medical Practitioner or Registered Nurse Prescriber.

- Ensure that student is provided with the appropriate tear pad stating date and time vaccine given (Appendix E) and the vaccinating organisation’s contact details.

- Collect the consent forms and collate the statistics required for the School Vaccination Session Report Form (Appendix F) at the end of the session.

- Offer one appointment to attend a mop up clinic to students who were not vaccinated on the day. If the school team is notified that the student cannot attend the mop up clinic, one further appointment should be arranged.

- Carry out a search on the SIS to locate the client record, if not found set up a new client record. Input all school vaccinations i.e MMR, 4in1, HPV, Tdap and MenACWY data on to the SIS including clients who did not or could not attend.

- For those students in junior infants, check the consent form and SIS (PCI MMR status box) to see if school MMR dose constituted their first dose and if so, arrange for them to receive a second dose at least one month later either at a mop up clinic or with their GP.

- Ensure all data entered is accurate and in accordance with data entry standards by running quality reports after school or clinic data is entered.

- Once a record is entered onto the SIS, write the system’s client ID and the school roll number on the top of the consent form so that other users know this record is registered.

- In the event of an incident occurring during a vaccination session an incident report must be completed according to the HSE policy on incidents.

- If there is a vaccine error e.g. an incorrect vaccine is administered to one or more students, the record should be updated by the administrator who becomes aware of the error indicating the actions taken to bring this to the attention of the medical team; and the National Immunisation Office must also be informed.
If errors are made on the SIS that you cannot resolve yourself, inform the CHO system administrator as soon as possible so that the errors can be rectified.

Local school teams are responsible for determining whether the Department of Education denominators are fit for the purpose of establishing the school cohort by requesting the school denominator for the 2019/2020 academic year.

**Vaccinators role and responsibilities (Nurses, Registered Nurse Prescribers or Medical Officers)**

- Each vaccinator on the team will be accountable for his/her own clinical practice.
- Each vaccinator should report to their relevant line manager.
- Each vaccinator should ensure that they are familiar with and adhering to the practices as set out in this supporting information.
  - Be aware of the school’s health and safety regulations during each school visit
- Be available to answer queries from parents/legal guardians/students, teachers and other members of the immunisation team.
- Ensure that all vaccines are used within the recommended time frame.
  - MMR (Priorix or MMRvaxPro) must be used within one hour of reconstitution or discarded, Nimenrix should be used as soon as possible after reconstitution and discarded if not used within eight hours.
- Any vaccines removed from their packaging should be used at that vaccination session or discarded.
- Check that the appropriate vaccine(s) for the vaccination session are in the cool box and the expiry date has not passed and record this on the school vaccination session report form
- Check that appropriate drugs and equipment are available for resuscitation and record this on the school vaccination session report form
- Before administration of each vaccine, each vaccinator should:
  - Check the vaccine identification label to ensure that the correct vaccine for the student.
  - Check the expiry date on the vaccine box and confirm that the vaccine has not expired.
  - Check there is no evidence of any foreign particulate matter and/or variation of physical aspect of the vaccine. Discard the vaccine if these changes observed.
  - The SmPC for all the vaccines used in the school immunisation programme recommend that each vaccine is well shaken before administration.
  - Confirm student’s identity (Confirm name, address, date of birth and parent or legal guardian’s name by asking: “What is your full name? When is your Birthday? Where do you live? Who signed the consent form? What is their name?” For younger children it may be necessary to confirm identity with the child’s teacher or an appropriate liaison person (as agreed with the School Principal) from the school.
  - Confirm that informed consent has been given by a parent/legal guardian/student aged 16 years and older.
  - Any clinical issues raised on the consent form should be addressed prior to vaccination
For Tdap/IPV check that there is an interval of at least six months between the booster dose of Tdap/IPV and the completion of a primary course of tetanus containing vaccine (if applicable).

For HPV vaccine check that the interval since the previous HPV vaccine is appropriate for this dose, i.e. for HPV9 the interval is at least 5 calendar months and the 4 day rule applies.

For dose 2 of MMR vaccine check that it is at least 1 month since dose 1.

Check that the vaccine has been prescribed by the Medical Officer or Registered Nurse Prescriber or in the case of administration, can be given in under medicine protocol.

Vaccines should be protected from light and should not be removed from their packaging until required for use.

Ensure the student is correctly positioned for the safe administration of the vaccine(s) with help from a parent/legal guardian, other member of the vaccination team, or member of school staff as appropriate. See guidelines on holding child during immunisation in Chapter 2 of the Immunisation Guidelines for Ireland available at http://bit.ly/NIACCh2

- Administer a single dose of 0.5ml of the appropriate vaccine by intramuscular (IM) injection at a 90° angle to the skin in the densest part of the deltoid muscle of the arm.

- Vaccinators should wash their hands or use the disinfectant gel after each vaccination.


Since 2014 all HSE vaccine tenders have required information from the manufacturers on their compliance with the European Sharps Directive OJ:L:2010:134:0066:0072 However to date European vaccine manufacturers continue to plan how to comply with these regulations and no manufacturer is producing vaccines fitted with safety needles.

- At all times ensure that sharps containers are managed in accordance with National Guidelines and located appropriately and safely, off the floor and away from children and the public, see http://bit.ly/NIACCh1

- Complete the administration details including the trade name of vaccine, batch number and expiry date, clearly at the end of the consent form immediately after the vaccine is given. It is not appropriate to record this at the end of the session.

- Use of pre printed labels recording batch numbers and/or expiry date is not recommended.

- The prescriber box should already be completed with either doctor or Registered Nurse Prescriber (RNP) signature and MCRN/PIN if the vaccine has been prescribed by the doctor or RNP.

- When recording the administration of a vaccine under medicine protocol the nurse should enter "Med P" in the prescriber box and enter signature and PIN in the vaccinator box.

- All vaccinators (doctors, RNPs and nurses) should enter signature and PIN/MCRN in the vaccinator box.

- Ensure the student’s immunisation passport is completed and given to all students before they
leave the vaccination area (Tdap/IPV and MMR). The immunisation passport is retained by the HSE after the first dose of HPV9 vaccine and is given to students after completion of the vaccine schedule.

- Ensure that student is provided with the appropriate tear pad stating date and time vaccine given.
- Ensure that each student remains in the vicinity of the vaccination area under observation for 15 minutes after vaccination.
- The nurse observing students post vaccination will manage any students experiencing symptoms within their scope of practice and consult with the Medical Officer as required. As the session draws to a close ensure that only the required number of vaccines to complete the vaccination session has been drawn up/reconstituted.
- One doctor and another vaccinator should be present while vaccinations are being given, and for 30 minutes after the last vaccine is administered to deal with anaphylaxis or any other adverse events, including syncope that might occur.
- Take queries from parents/legal guardians/students about possible adverse reactions that occur after the team has left the vaccination venue.
- Report adverse events to the HPRA. A medication error does not need to be routinely reported to the HPRA unless the student experiences harm (i.e. an adverse reaction) associated with it. In any such cases involving adverse reactions, an adverse reaction report should be submitted to the HPRA, including information on the nature of the error involved.
- In the event of an incident occurring during a vaccination session, an incident report must be completed by the professional primarily involved in the incident and forwarded to the relevant manager. If there is a vaccine error, e.g. an incorrect vaccine is administered to one or more students, the National Immunisation Office must also be informed.
- In the event of a student fainting either before or after vaccination, parents/legal guardians should be contacted. Fainting is commoner among adolescents and is likely to recur. Advice should be given about precautionary measures if the student ever needs any further injections.

**Medical officers should additionally:**

- Prescribe the relevant vaccine by signing in the prescriber box on the consent form (including Medical Council Registration Number - MCRN).
- Carry out an individual medical assessment for students if requested by nurse working under a medicine protocol.
- Be present while vaccines are being given by nurse vaccinators, and for 30 minutes after the last vaccine is administered to deal with anaphylaxis or any other adverse events, including syncope that might occur. An adverse event clinical record may be completed.

**Registered nurse prescribers should additionally**

- Prescribe the relevant vaccine by signing in the prescriber box on the consent form (including ABA registration number/PIN).
The Registered Nurse Prescriber should separate the activity of prescribing a medicine and the subsequent actions of supplying and/or administering the medicine. Where possible another registered nurse or midwife should undertake the administration of the medicine. “Whilst acknowledging the fundamental principles associated with the separation of responsibilities for prescribing and supplying/administering medicines, the local site specific collaborative practice agreement (CPA) may outline situations where the RNP may in fact be involved in a cross over and merging of these activities as part of her/his provision of patient/service-user care. The CPA should provide for the auditing of such practices as part of the overall audit of prescriptive practices” (Practice Standards and Guidelines for Nurses and Midwives with Prescriptive Authority. An Bord Altranais, 2018, p.21).
Appendix C: Medicine Protocols

Administration of vaccines under Medicine Protocol

- Registered nurses and midwives working under medicine protocols will be accountable for their own clinical practice and should be familiar with and adherent to the practices as set out in this document.
- Registered nurses and midwives working under medicine protocols should report to their relevant line manager.
- The Nursing and Midwifery Board of Ireland defines medicine 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 medicine protocol involves the authorisation of the nurse or midwife to supply and administer a medicine 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 medicine when a medicine protocol is in effect.
- The school immunisation medicine protocols enable registered nurses employed in the HSE who have undertaken the required education and training programmes to administer Schools Immunisation Programme vaccines without individual prescription.
- In assessing the student’s suitability for vaccination the nurse working under medicine protocol should also pay particular attention to pages 12-19 of this document.
- All students meeting the exclusion criteria of a medicine protocol must be referred to the medical practitioner for an individual medical assessment.
- Where the Medical Officer prescribes the vaccine following individual medical assessment a nurse may administer the vaccine within the nurse’s scope of practice.
- When recording the administration of a vaccine under medicine protocol the nurse should enter “Med P” in the prescriber box and enter signature and PIN in the vaccinator box.

Visit https://www.hse.ie/eng/health/immunisation/hcpinfo/schoolproghcp/protocols/ to download the medicine protocols for the school vaccination programme.
Appendix D: Vaccination Consent Forms


Appendix E: Post Vaccination Tear Pads


Appendix F: Session Report Forms

Appendix G: Tips for Conducting a School Vaccination Session to Reduce the Incidence of Syncope

Adapted from the Immunisation Programme in Victoria, Australia

Post-vaccination fainting has been reported with most vaccines. Based on data from the USA, syncope is most common after three adolescent vaccines HPV, quadrivalent meningococcal vaccine and Tdap. It is not known whether this is due to the vaccines or if the increased incidence in this age group merely reflects that adolescents are generally more likely to experience fainting. The onset of syncope is usually immediate. A review of syncope after vaccination found that 89% occurred within 15 minutes of vaccination.

*Experience from Australia suggests that the organisation of clinics can be a key factor in reducing the number of fainting episodes.

- Organise sessions to be run in a venue that allows privacy for each student being vaccinated so that other students are not watching the procedure prior to their vaccine being administered.
- Have a separate entry and exit point so students arriving for vaccination do not cross paths with students leaving after vaccination. Students should be brought in small groups (less than 10 students) to the area where vaccination is occurring.
- Arrange for students to be seated or lying down when being administered their vaccines in case of an immediate faint.
- Provide a nearby area for adolescents to wait following the vaccination. This area needs to be readily accessible to immunisation staff in the event of a faint or other immediate adverse event.
- Supervision may be required to ensure students remain seated while waiting the 15 minutes after being vaccinated in case of fainting.
- The vaccination area should be free of staircases and concrete as these areas can contribute to injury following a fainting episode.
- It is important for a person familiar to each class to be present at the venue in order to assist with identification of students, control their behaviour and create a calm environment.
- Ensure the vaccine session is run with only one class present at a time to minimise the sense of mass anxiety that a few students can engender in other vulnerable students.
- Following vaccination, students are required to wait a minimum of 15 minutes in a nearby location; however, this time should be longer if a student is feeling dizzy or unwell after vaccination.
- Following vaccination, adolescents should refrain from strenuous activity for up to 30 minutes in case of a delayed fainting episode.
Management of Syncope:

- Patient should be placed in the recumbent position and observed until they are fully recovered.
- Recovery of consciousness occurs within a minute or two, but patients may take some more time to recover fully.
- Fainting is sometimes accompanied by brief clonic seizure activity (i.e. rhythmic jerking of the limbs, but this requires no specific treatment or investigation.


Appendix H: Adverse event clinical record


Appendix I: HPRA Adverse Event Report Form

Appendix J: Emergency drugs and Equipment

Emergency Anaphylaxis Kit – as per updated section February 2019 in Immunisation Guidelines

The availability of protocols, equipment and drugs necessary for the management of anaphylaxis should be checked before each vaccination session

- Copy of “Anaphylaxis: Treatment in the Community” from Immunisations Guidelines for Ireland
- 3 x 1ml ampoules of Epinephrine (1:1,000, 1mg/ml)
- or
  - 6 x Epinephrine auto-injectors, 150 mcg, 300 mcg and/or 3 x 500 mcg* (depending on age of vaccinees)
  - 3 x 1 ml syringes
  - Needles 3 x 16mm, 3 x 25mm, 3 x 37 – 40mm
  - 1 pocket mask
  - Sphygmomanometer (optional)
  - Stethoscope (optional)
  - Pen and paper to record time of administration of Epinephrine

*Ensure that 500mcg auto-injectors have 25mm needles

The kits should be kept closed to ensure the drugs are not exposed to light and stored at room temperature. The kits require regular verification to replace drugs before their expiry date.

There should also be a back-up emergency anaphylaxis kit so that a vaccination session can continue in the event that a student has been treated for anaphylaxis using up the anaphylaxis kit.

Emergency equipment

1. Access to a telephone to call an ambulance.
2. Copy of “Anaphylaxis: Treatment in the Community” from Immunisation Guidelines for Ireland.
3. Adverse event clinical record (Appendix H of Supporting Information for Staff) and pen to record time of administration of epinephrine/adrenaline and clinical condition of patient.
4. Headed notepaper to write referral letter for hospital.
5. Sphygmomanometer x 1 with adult and paediatric cuff.
Appendix K: Maintenance of Cool Box Temperature

Vaccines should be stored in the vaccine fridges at the main health centres in accordance with the local Vaccine Fridge Standard Operating Procedure (SOP).

Validated cool boxes should be used from a recognised medical supply company and should be used in conjunction with a validated thermometer or data logger device with an external display. Domestic cool boxes should not be used.

Cool box temperature should be maintained between +2°C and +8°C at all times.

- Ice packs should be wrapped completely unless they have their own cover that encloses them completely this is to prevent the ice pack coming in direct contact with vaccine.
- Frozen ice packs should be placed in the cool box for a minimum of 15 minutes before the vaccines are packed into the cool box.
- The number of packs used should be as per cool box manufacturer’s instruction/best practice recommendations.
- The ice packs should be positioned appropriately above, below and around the vaccines as space in the cool box allows.
- The temperature probe should be placed between vaccine boxes in the middle of the cool box.
- The lid of the cool box should be tightly shut and kept closed as much as possible (reducing lid opening helps to keep internal temperatures stable.
- It may be necessary to add/remove ice packs as the temperature dictates.
- Only the number of vaccines estimated for administration on any particular day should be brought to the school.
- The vaccines must be transported in their original packaging, and placed in the cool box as per the manufacturer’s instructions.
- The time of packing and returning the vaccines should be recorded.
- The cool box should be placed in,
  - An appropriately ventilated room
  - Away from any heat source
  - Away from direct sunlight
- Record the temperature of the probe in the cool box:
  - Before leaving the health centre
  - At the beginning of the vaccination session
  - At the end of the vaccination session
  - On returning the vaccines to the fridge
- Vaccines, in their original packaging that have been maintained under cold chain conditions, and are returned to the health centre fridge following school vaccination session should be marked and
used first on their next excursion to a school.

- If these marked vaccines are taken to a second vaccination session and are not used providing the cold chain has been maintained these vaccines can be returned to the vaccine fridge again, for administration at the next session.

- If a temperature deviation has occurred, contact the Chief Pharmacist or the Medical Officer of the National Immunisation Office (at 087 9915452 or 01 8676108) for further advice. The National Immunisation Office will carry out a risk assessment and will advise on a case by case basis whether it is appropriate to use the vaccines later or whether they should be discarded.

- A battery powered continuous temperature recording device (data logger) may be used in cool boxes where vaccines are stored. This should be removed from the vaccine fridge with the vaccines and placed in the middle of the cool box adjacent to the vaccines. This is an independent device and gives an accurate account of the temperatures reached and the duration of any temperature breach. The information on the data logger can be downloaded at the end of a vaccination day to confirm that any returned vaccines have remained within temperature. This does not replace max/min thermometers which need to be checked when removing vaccines prior to administration.

- The cool box thermometer should be sent back to the manufacturer for calibration on an annual basis.

**Procedures following breakdown in the “Cold Chain”**

Check position of temperature probe. The temperature probe should be placed into a vaccine box in the middle of the vaccines. Reset probe and ensure it is positioned correctly away from ice packs. Close box firmly and recheck temperature in 10 minutes.

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

For any other queries with respect to vaccine storage, cold chain, etc. contact the Chief Pharmacist at the NIO on the numbers above.
Appendix L: List of Useful Links and Resources

Further information regarding the vaccines in the Schools Immunisation Programme and the diseases they protect against can be found on the following websites:

- Department of Health available at [www.health.gov.ie](http://www.health.gov.ie)
- Health Protection Surveillance Centre available at [http://www.hpsc.ie](http://www.hpsc.ie)
- Health Products Regulatory Authority available at [http://www.HPRA.ie](http://www.HPRA.ie)
- Medicines Information online available at [http://www.medicines.ie](http://www.medicines.ie)
- Centre for Disease Control and Prevention – immunisation information available at [http://www.cdc.gov/vaccines/](http://www.cdc.gov/vaccines/)
- United Kingdom immunisation website available at [https://www.gov.uk/government/collections/immunisation](https://www.gov.uk/government/collections/immunisation)
- Further information on cervical cancer and cervical cancer screening can be found on the following websites;
- National Cancer Screening Service available at [http://www.cancerscreening.ie](http://www.cancerscreening.ie)
- National Cancer Registry Ireland available at [http://ncri.ie](http://ncri.ie)