

## Medicine Protocol for the Administration of Tetravac (Diphtheria, Tetanus, Pertussis and Poliomyelitis) vaccine (adsorbed), by registered nurses and registered midwives

This medicine protocol is a specific written instruction for the administration of Tetravac Vaccine DTaP/IPV (diphtheria, tetanus, pertussis (acellular, component) and poliomyelitis (inactivated) vaccine (adsorbed), to children in Primary School by registered nurses and registered midwives. **This medicine protocol is valid for the 2020/2021 HSE School Immunisation Programme.**

This medicine protocol enables registered nurses and midwives employed in the voluntary and statutory services of the HSE who have undertaken the required education and training programmes to administer Tetravac (Diphtheria, tetanus, pertussis (acellular, component) and poliomyelitis (inactivated) vaccine (adsorbed), with reference to and guidance from Nursing & Midwifery Board of Ireland, National Nursing and Midwifery Immunisation Group, National Immunisation Advisory Committee, National Immunisation Office, HSE and in accordance with the Summary of Product Characteristics for Tetravac vaccine as detailed by the Health Products Regulatory Authority at [www.hpra.ie](http://www.hpra.ie) :

- An Bord Altranais (2007) *Guidance to Nurses and Midwives on Medication Management* Dublin: An Bord Altranais
- Health Services Executive (2019) *Directions for Nurses and Midwives for the Management of a Patient who Develops Anaphylaxis or suspected anaphylaxis incorporating Medicine Protocol for the Administration of Epinephrine (Adrenaline) injection BP 1:1000 by intramuscular injection for nurses and midwives for the management of anaphylaxis or suspected anaphylaxis.* Dublin: Health Service Executive.
- National Immunisation Office (2020) Information for Staff: Schools Immunisation Programme 2020/2021 available at available at:  
<https://hse.ie/eng/health/immunisation/hcpinfo/guidelines/immunisationguidelines.html>
- National Immunisation Advisory Committee *Immunisation Guidelines for Ireland* Dublin: Royal College of Physicians of Ireland National Immunisation Advisory Committee (Online Update available at <https://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/>)
- Nursing and Midwifery Board of Ireland (2014) *Code of Professional Conduct and Ethics for Registered Nurses and Registered Midwives.* Dublin: Nursing and Midwifery Board of Ireland available at: <https://www.nmbi.ie/Standards-Guidance/Code>.
- Nursing and Midwifery Board of Ireland (2015) *Practice Standards for Midwives.* Dublin: Nursing and Midwifery Board of Ireland available at: <http://www.nmbi.ie/Standards-Guidance/Midwives-Standards>.
- Nursing and Midwifery Board of Ireland (2015) *Recording Clinical Practice. Guidance to Nurses and Midwives.* Dublin: Nursing and Midwifery Board of Ireland available at: <https://www.nmbi.ie/Standards-Guidance/More-Standards-Guidance/Recording-Clinical-Practice>
- Nursing and Midwifery Board of Ireland (2015) *Scope of Nursing and Midwifery Practice Framework.* Dublin: Nursing and Midwifery Board of Ireland available at: <https://www.nmbi.ie/Standards-Guidance/Scope-of-Practice/Nursing-Practise-Scope-Definition>

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 nurse or midwife in identified clinical situations. A medicine protocol involves the authorisation of the nurse/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 medication when a medicine protocol is in effect” (An Bord Altranais, 2007).

**Medicine Protocol for the Administration of Tetravac Vaccine by registered nurses and midwives to children/students in Primary Level School through a School Immunisation Programme**

<b>Document reference number:</b>	ONMSD 2020 - 011
<b>1.0 Critical Elements</b>	
<b>Name of Organisation where protocol applies</b>	Health Service Providers across the voluntary and statutory services of the Health Service Executive (HSE). This Medicine Protocol applies to: <ul style="list-style-type: none"> <li>Registered nurses and midwives involved in the supply and administration of the Tetravac vaccine to children/students in primary school through a School Immunisation Programme.</li> </ul>
<b>Date the protocol comes into effect</b>	September 2020
<b>Date for review of protocol</b>	May 2021
<b>Document prepared by:</b>	Office of the Nursing and Midwifery Services Director (ONMSD) HSE, in collaboration with the National Immunisation Office (NIO) at the request of Dr. Lorraine Doherty , National Clinical Director Health Protection, HSE
<b>Names and Signatures of the employing authority who is authorising the implementation of the protocol</b>  <i>"On behalf of the authority employing professionals authorised to administer under this medicine protocol, I have read this medicine protocol and authorise its implementation"</i>	<p>Name: <b>Dr. Lorraine Doherty</b>, National Clinical Director Health Protection, HSE</p> <p>Signature: </p> <p>Name: <b>Dr Colm Henry</b>, Chief Clinical Officer, HSE</p> <p>Signature: </p> <p>Name: <b>Dr Geraldine Shaw</b>, Nursing and Midwifery Services Director, HSE</p> <p>Signature: </p>

<b>2.0 Clinical Criteria</b>	
<b>Clinical Condition for use of the protocol</b>	The clinical condition for which this medicine protocol has been developed is for the active immunisation against and prevention of diphtheria, tetanus, pertussis (whooping cough) and poliomyelitis (polio) disease. Tetravac is given as a booster vaccination to children who have previously received DTaP/IPV containing vaccines in the primary childhood immunisation schedule
<b>Circumstances in which the medicine protocol applies</b>	The School Immunisation Programme (SIP) will be delivered annually by the Health Service Executive (HSE) The aim of the immunisation programme is to provide a booster dose of Diphtheria, tetanus, pertussis (acellular, component) and poliomyelitis (inactivated) vaccine, vaccine to children who previously completed primary vaccination against these diseases as recommended in the Immunisation Guidelines for Ireland <a href="https://www.hse/eng/health/immunisation/hcpinfo/guidelines/">https://www.hse/eng/health/immunisation/hcpinfo/guidelines/</a> .
<b>Inclusion criteria for children/students treatment using the medicine protocol</b>	All children in primary school usually delivered in junior infants and age equivalent in e.g. special schools and home schooled students. <a href="https://www.hse.ie/eng/health/immunisation/pubinfo/schoolprog/4in1mmr/schoolguidelines.pdf">https://www.hse.ie/eng/health/immunisation/pubinfo/schoolprog/4in1mmr/schoolguidelines.pdf</a> Children with valid consent.
<b>Exclusion criteria for children/students using the medicine protocol</b>	<ul style="list-style-type: none"> <li>• Children who have not commenced or completed primary immunisation course.</li> <li>• Known systemic hypersensitivity reaction to any component of Tetravac or a vaccine containing the same substances or to pertussis vaccines (acellular or whole cell pertussis).</li> <li>• Acute febrile illness: The presence of a minor infection such as a mild upper respiratory infection or low grade fever is not a contraindication to immunisation.</li> <li>• Children with a contraindication to intramuscular injection (haematological disorder/coagulation disorder e.g. haemophilia, severe thrombocytopenia).</li> <li>• Children who are immunocompromised either due to disease or treatment.</li> </ul>
<b>Actions to be taken for those who are excluded from the Protocol</b>	<ul style="list-style-type: none"> <li>• All children meeting exclusion criteria must be referred to the medical practitioner for an individual medical assessment.</li> <li>• Document action in clinical notes</li> <li>• Where Tetravac vaccine is prescribed following medical assessment, the nurse or midwife may administer Tetravac vaccine within their scope of practice.</li> </ul> <p><i>Note: In determining their scope of practice, nurses and midwives must make judgements about their competency to carry out a role or activity (NMBI, 2015).</i></p>
<b>Description of circumstances and referral arrangements when further advice or consultation is required</b>	Discuss the student with the Medical Practitioner or lead nurse in the event of:  Previous adverse reaction Other clinical concerns

<p><b>Documentation required for the implementation of this medicine protocol</b></p>	<p>A consent form must be completed by the parent /legal guardian for all children who receive the Tetravac vaccine. Appropriate details including the batch number must be recorded on the consent form.</p> <p>The following documents will be required at each school vaccination session:</p> <ul style="list-style-type: none"> <li>• Vaccination session form</li> <li>• Blank Vaccine consent forms</li> <li>• Vaccine Information Leaflets</li> <li>• Patient held record cards</li> <li>• Health Products Regulatory Authority Adverse Reaction Reporting forms</li> <li>• HSE Incident/near miss report forms (NRIF, 2020)</li> <li>• Tear pads for after vaccination</li> </ul> <p>It is the responsibility of each nurse or midwife to be familiar with the appropriate documentation to support the safe administration of Tetravac vaccine which includes the following:</p> <ul style="list-style-type: none"> <li>• Information for Staff: School Immunisation Programme 2020/2021</li> <li>• Medicine Protocol for the administration of Tetravac</li> <li>• Directions for nurses and midwives for the management of a patient who develops anaphylaxis or suspected anaphylaxis incorporating <i>Medicine Protocol for the Administration of Epinephrine (adrenaline) Injection BP 1:1000 by intramuscular injection by nurses and midwives for the management of a patient with anaphylaxis or suspected anaphylaxis (HSE 2019)</i>, available at <a href="https://www.hse.ie/eng/health/immunisation/hcpinfo/fluinfo/adrenalineprotocol.pdf">https://www.hse.ie/eng/health/immunisation/hcpinfo/fluinfo/adrenalineprotocol.pdf</a></li> </ul>
<p><b>3.0 Name of Medicine</b></p>	<p>Tetravac</p> <p><b>Dose</b> 0.5ml of vaccine,  <b>Route</b> Intramuscular only  <b>Site</b> Deltoid (left recommended)</p>
<p><b>Link to Medicine</b></p> <p><b>Details of product information and other data including instructions for supply and administration is available from the Health Products Regulatory Authority at <a href="http://www.hpra.ie">www.hpra.ie</a></b></p>	<p>Tetravac 2020/2021</p> <p><b>Link to Summary of Product Characteristics</b>  <a href="https://www.hpra.ie/img/uploaded/swedocuments/Licence_PA2131-009-001_30102019150653.pdf">https://www.hpra.ie/img/uploaded/swedocuments/Licence_PA2131-009-001_30102019150653.pdf</a></p> <p><b>Link to Patient Information Leaflet:</b>  <a href="https://www.hpra.ie/img/uploaded/swedocuments/4f63ba70-1e20-462e-b175-7d2b8f8e9dea.pdf">https://www.hpra.ie/img/uploaded/swedocuments/4f63ba70-1e20-462e-b175-7d2b8f8e9dea.pdf</a></p>
<p><b>Procedure for the reporting and documentation of errors and near misses involving the medicine</b></p>	<p>In the case of medicine errors that directly involve the child, i.e. wrong medicine/patient/dose/route being administered or another medicine error, the registered nurse or registered midwife must remain with the child and closely monitor them for any adverse reactions.</p> <p>Vital signs should be recorded and the student should be reviewed by the registered nurse/midwife and/ or medical practitioner.</p> <p>The incident must be reported to the relevant line manager as soon as possible.</p> <p>The incident and all actions taken must be promptly recorded in the child's documentation/notes and the relevant report form completed.</p> <p>The incident and all actions must be promptly recorded and the National Incident</p>

	<p>(National Incident Report Form (NIRF--01-V 11 March 2020):  <a href="https://www.hse.ie/eng/about/qavd/incident-management/nirf-01-v11-person.pdf">https://www.hse.ie/eng/about/qavd/incident-management/nirf-01-v11-person.pdf</a></p> <p>The child's parent and/or legal guardian must be informed of the incident.</p> <p>An incident report form must be completed by the registered nurse or registered midwife and forwarded to the relevant line manager as per local policy.</p> <p>Any suspected adverse reactions associated with medication errors should be reported to the HPRA as outlined below. (As per local policy).</p> <ul style="list-style-type: none"> <li>• Any errors and near misses not involving medications (Needle stick injuries etc.), the incident and all actions taken must be promptly recorded on the relevant National Incident Management Report form and forwarded to the relevant line manager.</li> <li>• Refer 'EMI Tool Kit' (<a href="https://www.hpsc.ie/a-z/EMIToolkit/">https://www.hpsc.ie/a-z/EMIToolkit/</a>).</li> </ul>
<p><b>Procedure for reporting Adverse Drug Reactions to the Health Products Regulatory Authority (HPRA)</b></p>	<p>The relevant nursing or midwifery staff should report to the HPRA any suspected adverse reactions, in accordance with criteria outlined by the HPRA. This reporting may be carried out in line at <a href="https://www.hpra.ie">https://www.hpra.ie</a> or through the use of the yellow card system which is available in the downloadable format from the HPRA website, or on the request from the HPRA.</p> <p>The incident and all actions taken must be promptly recorded in accordance with the criteria outlined by the HPRA: <i>Management of a Patient with Anaphylaxis: Treatment in the Community</i>. (National Immunisation Advisory Committee, 2019) – available online at</p> <p><a href="https://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/Anaphylaxis.pdf">https://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/Anaphylaxis.pdf</a></p>
<p><b>Resources and equipment required</b></p>	<ul style="list-style-type: none"> <li>• Vaccine (pre-filled syringe)</li> <li>• Fridge/Cool box with minimum/maximum temperature recording device to monitor the cold chain temperature (between +2°C and +8°C)</li> <li>• Disposable kidney dishes/coloured trays</li> <li>• Gauze swabs/Plasters</li> <li>• Sharps bins, and bags for disposal of other hazardous material</li> <li>• Alcohol hand rinse</li> <li>• Access to telephone</li> <li>• Resuscitation equipment and drugs in accordance with the <i>Management of a Patient with Anaphylaxis or suspected anaphylaxis</i>, (National Immunisation Advisory Committee, 2019) available at <a href="https://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/Anaphylaxis.pdf">https://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/Anaphylaxis.pdf</a></li> <li>• Access to medical support</li> <li>• Safe storage areas for medicines and equipment</li> <li>• Current medicine protocol for Tetravac Vaccine.</li> </ul>
<p><b>Audit process to identify appropriate use of the protocol or unexpected outcomes</b></p>	<p>All documentation will be held for review and audit purposes as per local policy.</p>

<b>4.0 Information for child/student/parent/guardian</b>	
<p><b>Advice to be given to the child/student/parent/guardian before treatment</b></p>	<p><b>The HSE 4 in1 and MMR vaccine Information for parents of children in Junior infant’s booklet must have been supplied with the consent form to each parent/legal guardian prior to administration of the DTaP/IPV vaccine.</b></p>
<p><b>Advice to be given to the child/student/parent/guardian after treatment</b></p>	<p><b>After Treatment</b> An Information Tear Pad, stating date and time of vaccination must be given to all students for parental/guardian’s attention. The Tear Pad includes advice about contacting relevant medical personnel in the event of adverse reaction occurring following administration of the vaccination.</p> <p>The child/student must be advised to remain seated in the post vaccination observation area for 15 minutes to allow monitoring of any immediate reaction including possible anaphylactic reaction and must be advised to report any side effects to the registered nurse or registered midwife who is present.</p>
<p><b>Details of any necessary follow-up, action and referral arrangements</b></p>	<p>In the event of an adverse reaction the nurse/midwife must ensure that all procedures are adhered to as outlined in Section 3.</p>
<b>5.0 Staff authorised to use this medicine protocol</b>	
<p><b>Professional qualifications, training, and competence required prior to using this medicine protocol</b></p> <p><b>Professional Qualifications</b></p> <p><b>Training and Competence:</b></p>	<p>Registered nurse or registered midwife on the active register maintained by The Nursing and Midwifery Board of Ireland.</p> <p>National Schools Immunisation programme for registered nurses and registered midwives on the use of this medicine protocol.</p> <p>Basic Life Support for Health Care Providers within the last two years.</p> <p>Initial anaphylaxis programme (“<i>National Anaphylaxis Education Programme for Health Care Professionals</i>”) via HSELand followed by a one and a half hour classroom based skills workshop (replacing the previous four hour classroom based programme). Subsequent updates every two years via HSELand Anaphylaxis e-learning programme available at <a href="http://www.hse.ie">www.hse.ie</a>.</p> <p>The registered nurse/midwife must complete the “<i>Competency Self - Assessment Tool for registered nurses and registered midwives to supply and administer vaccines under medicine protocols through a schools immunisation programme</i>”.</p> <p><b>Recommended:</b></p> <p><i>E-learning Guide to Medicine Management</i>, available at <a href="http://www.hseland.ie">www.hseland.ie</a></p> <p><i>Introduction to Immunisation</i>, available at <a href="http://www.hseland.ie">www.hseland.ie</a></p>

## References

An Bord Altranais (2007) *Guidance to Nurses and Midwives on Medication Management* Dublin: An Bord Altranais

Health Products Regulatory Authority available at [www.hpra.ie](http://www.hpra.ie) (accessed 16<sup>th</sup> June 2020)

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National Immunisation Advisory Committee (2019) Anaphylaxis: Treatment in the Community. Available at <https://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/Anaphylaxis.pdf> .

National Immunisation Advisory Committee *Immunisation Guidelines for Ireland* Dublin: Royal College of Physicians Ireland (*Online Update available at* <https://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/>

*National Immunisation Office (2020) Information for Staff: School Immunisation Programme: Health Service Executive, 2020/2021*

*Nursing and Midwifery Board of Ireland (2014) Code of Professional Conduct and Ethics for Registered Nurses and Registered Midwives*. Dublin: Nursing and Midwifery Board of Ireland available at <https://www.nmbi.ie/Standards-Guidance/Code>

Nursing and Midwifery Board of Ireland (2015) *Practice Standards for Midwives* Dublin: Nursing and Midwifery Board of Ireland. And Midwifery Board of Ireland available at <http://www.nmbi.ie/Standards-Guidance/Midwives-Standards>

Nursing and Midwifery Board of Ireland (2015) *Recording Clinical Practice. Guidance to Nurses and Midwives*. Dublin: Nursing and Midwifery Board of Ireland available at: <https://www.nmbi.ie/Standards-Guidance/More-Standards-Guidance/Recording-Clinical-Practice>

Nursing and Midwifery Board of Ireland (2015) *Scope of Nursing and Midwifery Practice Framework*. Dublin: Nursing and Midwifery Board of Ireland available at: <https://www.nmbi.ie/Standards-Guidance/Scope-of-Practice/Nursing-Practise-Scope-Definition>