Patient Group Direction
for *Pharmacists and Nurses to*
administer Typhoid Vi vaccine for Travel
in individuals aged 12 months and over

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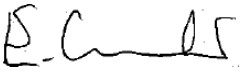
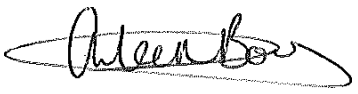
Dr Esther Curnock	Deputy Director of Public Health Consultant in Public Health Medicine, NHS Fife		05/05/2025
Ailean Boags	Lead Pharmacist Public Health& Community Pharmacy services NHS Fife		05/05/2025

This Patient group Direction has been approved on behalf of NHS Fife by:

Name	Designation	Signature	Date
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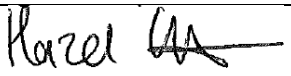
Hazel Close	Deputy Director of Pharmacy & Medicines NHS Fife		12/05/2025

1. Clinical condition to which the patient group direction applies

Indication	Active immunisation of individuals who are deemed to be at risk from exposure to *S. typhi* bacterium infection.
Inclusion criteria	• Valid consent to treatment according to NHS Fife policy *Adults and children 2 years and over who:* • intend to travel to or reside in countries where typhoid vaccination is currently recommended by recognised Scottish or UK national travel health websites to ensure adherence to the latest recommendations. the risk of exposure should be determined after careful risk assessment of an individual's itinerary, duration of stay, planned activities and medical history. *Children aged 12 months up to 2 years* (off-label use) who:* • following a detailed risk assessment, the risk of typhoid fever is considered high as indicated by recognised Scottish or UK national travel health websites to ensure adherence to the latest recommendations. * refer to cautions section.
Exclusion criteria	• No valid consent to treatment according to NHS Fife policy Individuals who: • are under 12 months of age • have had a confirmed anaphylactic reaction to a previous dose of typhoid Vi polysaccharide vaccine or to any components of the vaccine (including trace components from the manufacturing process which may include formaldehyde or casein, see SPC) Severe reactions to a previous dose of non-Vi typhoid vaccine do not contraindicate the subsequent use of a Vi-containing vaccine. • have a history of severe (i.e. anaphylactic reaction) to latex where the vaccine is not latex free • suffering from acute severe febrile illness (the presence of a minor infection is not a contraindication for immunisation)
Cautions / Circumstances when further advice should be sought from a senior clinician	• It is the responsibility of the designated, authorised staff using this PGD to ensure that treatment with the drug detailed in this direction is appropriate. If in any doubt, advice should be sought and recorded before the drug is administered / supplied. * For children between the ages of 12 months and two years advice should be sought from the lead clinician prior to vaccination. These children should only be immunised off-label if following a detailed risk assessment the risk of typhoid fever is considered high. • When children are too young to benefit fully from typhoid vaccination, scrupulous attention to personal, food and water hygiene measures should be exercised by the caregiver. • The Green Book advises there are very few individuals who cannot receive typhoid

	containing vaccines. When there is doubt, appropriate advice should be sought from the lead clinician rather than withholding the vaccine. • Individuals with immunosuppression and HIV infection can be given typhoid Vi containing vaccines although seroconversion rates and antibody titre may be lower (Green book, chapter 33). Vaccination is recommended even if the antibody response may be limited and the importance of scrupulous attention to personal, food and water hygiene must be emphasised. • The presence of a neurological condition is not a contraindication to immunisation but if there is evidence of current neurological deterioration, deferral of vaccination may be considered, to avoid incorrect attribution of any change in the underlying condition. The risk of such deferral should be balanced against the risk of the preventable infection, and vaccination should be promptly given once the diagnosis and/or the expected course of the condition becomes clear. **People with a Bleeding Disorder:** An individual risk assessment should be undertaken prior to vaccination. As with any intramuscular (IM) vaccination, the injection should be given with caution to patients with thrombocytopenia or any coagulation disorder as bleeding may occur following an intramuscular administration to these subjects. Therefore, patients with known bleeding disorders or on anticoagulant therapy should receive the vaccine by deep subcutaneous injection route to reduce the risk of bleeding. Individuals should be informed of the risk of developing haematoma and what to do if this occurs. (see also route of administration section) **Co-administration with other vaccines** Typhoid vaccine can be given at the same time as other vaccines, including other travel vaccines. When administering at the same time as other vaccines, care should be taken to ensure that the appropriate route of injection is used for all the vaccinations. The vaccines should be given at separate sites, preferably in different limbs. If given in the same limb, they should be given at least 2.5cm apart. The site at which each vaccine was given should be noted in the individual's records. **Syncope** Syncope (fainting) can occur following, or even before, any vaccination especially in adolescents as a psychogenic response to the needle injection. This can be accompanied by several neurological signs such as transient visual disturbance, paraesthesia and tonic-clonic limb movements during recovery. It is important that procedures are in place to avoid injury from faints. **Pregnancy and breastfeeding** No data are available on the safety of Vi polysaccharide vaccines in pregnancy or during lactation. There is no evidence of risk from vaccinating pregnant women or those who are breast-feeding with inactivated viral or bacterial vaccines or toxoids.
Action if excluded	• Do not use the PGD • The patient must be referred to an authorised prescriber • The reason for referral should be documented

	• Specialist advice must be sought on the vaccine and circumstances under which it could be given as immunisation using a patient specific direction may be indicated. The risk to the individual of not being immunised must be taken into account. • Advise the individual/parent/carer of preventative measures to reduce exposure to typhoid including careful attention to food and water hygiene and scrupulous hand washing. • Document the reason for exclusion and any action taken in accordance with local procedures. • Inform or refer to the lead clinician in charge. • In case of postponement due to acute severe febrile illness, advise when the individual can be vaccinated and ensure another appointment is arranged. • Individuals who have had a confirmed anaphylactic reaction to a previous dose of a typhoid Vi polysaccharide containing vaccine or any components of the vaccines should be referred to a clinician for specialist advice and appropriate management.
Action if patient declines treatment	• The patient must be referred to an authorised prescriber • The reason for refusal should be documented • Advise the individual about the protective effects of the vaccine, the risks of infection and potential complications of disease. Advise how future immunisation may be accessed if they subsequently decide to receive the vaccine. • Advise the individual/parent/carer of preventative measures to reduce exposure to typhoid including careful attention to food and water hygiene and scrupulous hand washing. • Document advice given and decision reached. Inform or refer to the lead clinician in charge.

2. Medication details

Name strength & formulation of drug	Typhoid Vi polysaccharide vaccine (Typhim Vi®) 0.5ml dose containing 25 micrograms Vi polysaccharide of S. typhi (Ty2 strain): **Note: This PGD does not cover the supply or administration of the live oral (Ty21a) typhoid vaccine, Vivotif®**
Route of administration	Typhim Vi® vaccine should be administered by intramuscular (IM) injection preferably into the deltoid area of the upper arm. Where administration into the deltoid is not possible, the anterolateral thigh can be considered. Intradermal injection may cause a severe local reaction and should be avoided. Vaccines should be given by deep subcutaneous injection to individuals with a bleeding disorder. (see also Cautions section) The vaccine should be visually inspected for particulate matter and discoloration prior to administration. In the event of any foreign particulate matter and/or variation of physical aspect being observed, do not administer the vaccine.

Dosage	0.5ml as a single dose
Frequency of administration	Vaccination should occur at least 2 weeks prior to potential exposure to infection with *S. typhi*. Based on individual risk assessment, vaccination may be considered up until departure but protection may be limited. In this case the importance of scrupulous attention to personal, food and water hygiene must be emphasized. **Reinforcing Immunisation** Individuals who plan to travel to an area where typhoid vaccination is currently recommended for travel and who have not received typhoid vaccine in the preceding 3 years should be re-vaccinated against *S. typhi*. Individuals who remain at risk of exposure to *S. typhi* should be revaccinated every three years. Note: Typhoid Vi polysaccharide containing vaccine may be used for revaccination when individuals have received non-Vi typhoid vaccine for the preceding dose.
Duration of treatment including maximum/ minimum period if applicable	See frequency section
Quantity to be supplied	One dose per occasion
Patient advice verbal and written	Written information to be given to individuals: • Provide manufacturer's consumer information leaflet/patient information leaflet (PIL) provided with the vaccine. Individual advice / follow up treatment: • Inform the individual/carer of possible side effects and their management. • The individual should be advised to seek medical advice in the event of a severe adverse reaction. • Inform the individual that they can report suspected adverse reactions to the MHRA using the Yellow Card reporting scheme on: http://yellowcard.mhra.gov.uk/ • The individual/parent/carer should be advised that typhoid Vi polysaccharide vaccine offers protection against typhoid fever caused by *S. typhi*, it does not prevent paratyphoid fever or infection with any other serotypes of *S. enterica*. • The individual/parent/carer should be advised that protection against *S. typhi* by vaccination may be less if a large number of infective organisms are ingested. • The importance of scrupulous attention to personal, food and water hygiene must be emphasised for those travelling to endemic areas. When applicable, advise individual/parent/carer when the subsequent dose is due.
Black Triangle Drug ▲	No
Legal category	Prescription Only Medicine (POM)

Use outwith SPC	• Typhim Vi® vaccine may be administered off-label to children between the age of 12 months and two years if the risk of typhoid fever is considered to be high, in accordance with the recommendations in Chapter 33 of the 'Green Book' and as indicated in an authoritative source. • Where a vaccine is recommended off-label consider, as part of the consent process, informing the individual/parent/carer that the vaccine is being offered in accordance with national guidance but that this is outside the product licence. • Vaccine should be stored according to the conditions detailed below. However, in the event of an inadvertent or unavoidable deviation of these conditions the PHS Guidance for Vaccine Storage and Handling must be followed link). If a vaccine or cold chain incident occurs the Health Protection Scotland Vaccine Incident Guidance should be followed vaccine-incident-guidance-actions-to-take-in-response-to-vaccine-errors and advice must be sought from the Pharmacy Governance team by calling 01383 565347. Where vaccine is assessed in accordance with these guidelines as appropriate for continued use, administration under this PGD is allowed.
Storage requirements	• Ensure within expiry date • Vaccine should be stored at a temperature of +2° to +8°C. • Store in the original packaging to protect from light. • Do not freeze. • Contact Pharmacy for advice if stored out with +2°C to +8°C • There may be circumstances when vaccines stored out with the recommended storage temperatures of +2 to +8°C can be administered providing the product has been confirmed as suitable for use by the manufacturers and Pharmacy • the PHS Guidance for Vaccine Storage and Handling must be followed (link) see above. In the event of an inadvertent or unavoidable deviation of these conditions, vaccine that has been stored outside the conditions stated above should be quarantined and risk assessed for suitability of continued off-label use or appropriate disposal.
Additional information	• Minor illnesses without fever or systemic upset are not valid reasons to postpone immunisation. If an individual is acutely unwell, immunisation may be postponed until they have fully recovered. • Immunological response may be diminished in those receiving immunosuppressive treatment.
Identification and management of adverse reactions	• For full details/information on possible side effects, refer to the marketing authorisation holder's SPC. • Local reactions following vaccination are very common, such as pain, swelling, erythema and induration at the injection site. • Adverse reactions to typhoid Vi polysaccharide vaccines are usually mild and transient, disappearing a few days after immunisation. • Other reported reactions to typhoid Vi polysaccharide vaccination include general

	symptoms such as fever, general aches, malaise, headache, nausea and itching. • As with all vaccines there is a very small possibility of anaphylaxis and facilities for its management must be available. • In the event of severe adverse reaction individual should be advised to seek medical advice. • Any adverse reaction to a vaccine should be documented in accordance with locally agreed procedures in the individual's record and the individual's GP should be informed. • All suspected serious reactions should be reported directly to the MHRA/Commission on Human Medicines through the Yellow Card scheme and recorded in the patient's medical notes. Reports should be made online at https://yellowcard.mhra.gov.uk
Monitoring if required	Following immunisation, patients remain under observation in line with NHS Fife policy. As syncope (fainting) can occur following vaccination, all vaccinees should either be driven by someone else or should not drive for 15 minutes after vaccination.
Follow up – appointment with or notification to GP required?	See Frequency section
Additional facilities/ supplies required	• Immediate access to anaphylaxis medication as appropriate to current NHS Fife procedure for the Management of Anaphylaxis. • Immediate telephone access to a senior clinician/authorised prescriber • Access to a BNF • NHS Fife Safe and Secure Use of Medicines Policy and Procedures (SSUMPP) should be followed • Adhere to hand decontamination policy
Disposal	Sharps, vials and other vaccine equipment, and any reconstituted vaccine that has not been used should be disposed of following NHS Fife policies for disposal of sharps and other harmful substances

3. Staff characteristics

Professional qualifications	The following classes of registered healthcare practitioners are permitted to administer vaccines: • pharmacists currently registered with the General Pharmaceutical Council (GPhC) • nurses and midwives currently registered with the Nursing and Midwifery Council (NMC) **Under PGD legislation there can be no delegation. Supply of the medication must be completed by the same practitioner who has assessed the patient under this PGD.**
Specialist competencies or qualifications	Persons must only work under this PGD where they are competent to do so All practitioners operating this PGD must demonstrate appropriate knowledge and skills to work under the PGD

	All persons operating this PGD: • must be authorised by name by their employer as an approved person under the current terms of this PGD before working to it • must be familiar with the vaccine product and alert to changes in the manufacturers product information/summary of product information • must be competent to undertake immunisation and to discuss issues related to immunisation to assess patients for vaccination and obtain consent • must be competent in the correct storage of vaccines and management of the cold chain if receiving, responsible for, or handling the vaccine • must be competent in the recognition and management of anaphylaxis or under the supervision of persons able to respond appropriately to immediate adverse reactions • must have access to the PGD and associated online resources • should fulfil any additional requirements defined by local policy • have undertaken NHS Fife approved anaphylaxis management training • have undertaken NHS Fife approved training in *paediatric and adult* basic life support • must be conversant with key issues in vaccine management (e.g. safe transport, maintaining cold-chain etc) in accordance with NHS Fife Policies • It is essential that the NHS Fife approved PGD e-learning programme is accessed and completed by NHS Fife employed staff • It is the responsibility of the designated authorised staff using this PGD to ensure that treatment with the vaccine detailed in the direction is appropriate. If in any doubt, advice should be sought and recorded before the vaccine is administered <u>Employer</u> The employer is responsible for ensuring that persons have the required knowledge and skills to safely deliver the activity they are employed to provide under this PGD • **As a minimum, competence requirements stipulated in the PGD must be adhered to**
Continued training requirements	• Maintain own professional level of competence and knowledge in this area • Keep up-to-date with information on contraindications, cautions and interactions for **Typhim Vi®** from the BNF, SPC and PIL and refer to a senior clinician if necessary • Annual update of anaphylaxis management according to NHS Fife Policy • Annual update of training in paediatric and adult basic life support • A 2 yearly update of the PGD e-learning programme is essential for NHS Fife employed staff.

4. Referral arrangements/Audit trail

Arrangements for referral to medical advice	• The patient may be referred to a senior clinician at any stage, if this is necessary, in the professional opinion of the *healthcare professional*. •
Records/Audit trail	• Enter in record - date - name of patient - Date of birth/ CHI no.

	- name of medicine - batch number and manufacturer - expiry date - dose/volume - quantity administered - route and site of administration - name of clinician providing treatment - signature / individual log-on details of clinician providing treatment • details of the source of the recommendation to vaccinate • Record on appropriate form. • Record medical history taken, diagnosis and the advice given to the patient/carer
References/ Resources & comments	• BNF / BNFc latest edition available at www.medicinescomplete.com • NHS Fife Consent Policy • NHS Fife Procedure for the Management of Anaphylaxis • NHS Fife Resuscitation Guidelines • NMC/RPS Administration of Medicines Guidance Jan 2019 • NHS Fife Safe and Secure Use of Medicines Policy and Procedures (SSUMPP) • Summary of Product Characteristics available at www.medicines.org.uk • Immunisation against Infectious Disease [Green Book] https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book • Immunisation against Infectious Disease [Green Book] chapter 33 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/877763/Greenbook_chapter_33_April_2020.pdf • Current edition of British National Formulary. • Marketing authorisation holder's Summary of Product Characteristics. • Professional Guidance on the Administration of Medicines in Healthcare Settings 2019 https://www.rpharms.com/Portals/0/RPS document library/Open access/Professional standards/SSHM Admin/Admin Meds prof guidance.pdf/ver=2019-01-23-145026-567 • Professional Guidance on the Safe and Secure Handling of Medicines https://www.rpharms.com/recognition/setting-professional-standards/safe-and-secure-handling-of-medicines/professional-guidance-on-the-safe-and-secure-handling-of-medicines • HPS Guidance for Vaccine Storage and Handling (link). • HPS Vaccine Incident Guidance vaccine-incident-guidance-actions-to-take-in-response-to-vaccine-errors • HPS PGD Administration of typhoid Vi vaccine for travel indicationsV2,2 Jan.2025

This Patient Group Direction has been assessed for Equality and Diversity Impact

5. Management and monitoring of patient group direction

Patient Group Direction
for *Pharmacists and Nurses to*
administer **Typhoid Vi vaccine** for Travel
in individuals aged 12 months and over

This patient group direction is to be read, agreed to, and signed by all *healthcare professionals* it applies to. One signed copy is to be given to each clinician with the original being kept on file by the line manager. One signed copy should be forwarded to the appropriate lead nurse / lead clinician where applicable.

Pharmacist/Nurse Agreement

I _____, confirm that I have read and understood the above Patient Group Direction. I confirm that I have the necessary professional registration, competence, and knowledge to apply the Patient Group Direction. I will ensure my competence is updated as necessary. I will have ready access to a copy of the Patient Group Direction in the clinical setting in which supply or administration of the medicine will take place.

I understand that it is the responsibility of the healthcare professional to act in accordance with the GPhC/ NMC Guidelines for Professional Practice and Guidelines for the Administration (or Supply) of Medicines and to keep an up to date record of training and competency.

Name of clinician -

Professional Category -

Registration No. -

Is authorised to give **Typhim Vi®** under this patient group direction

Place of Work -

Signature of clinician -

Date -

Authorised by: (not required for pharmacists)

Name of authorising clinician/manager----------

Signature - - - - - - - - - - - - - - - - - - -

Date -

Pharmacists send signed copy of this page to fife.pgd@nhs.scot

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