CLINICAL GUIDELINE

Immunisation and Best Practice

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

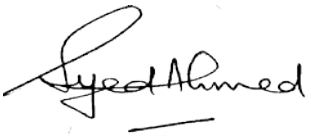
INTRODUCTION

This Immunisation and Best Practice Guideline has been recently updated to assist staff within Greater Glasgow and Clyde involved in immunisation within the community.

This guideline is designed to provide information and support to staff in the management of these clinics. This is not an exhaustive guideline but designed to be added to by individuals and used by staff to support their continuing professional development. Information changes frequently and so some internet resources are listed to provide links for further information. In addition, guidance and information will be circulated locally via CMO letters and Public Health Protection Unit (PHPU) newsletters http://www.nhsggc.org.uk/your-health/public-health/public-health-protection-unit-phpu/health-protection/phpu-newsletters/ and PHPU's Immunisation FAQs which covers a wide range of areas and links to relevant Guidance and current recommendations http://www.nhsggc.org.uk/your-health/public-health/public-health-protection-unit-phpu/immunisation/immunisation-faqs-2018/

More detailed general information about vaccination and individual vaccines are given in the Immunisation Against Infectious Disease (Green Book)

https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book and it is strongly recommended that all staff involved in immunisation are familiar with the on-line version of the Green Book before undertaking immunisation clinics.



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CONTENTS

1.0 IMMUNISATIONS ROUTINE AND OTHERWISE

1.1 Background and national policy

Vaccination policy in Scotland, in terms of recommendations/the introduction of new vaccination programmes and recommendations relating to existing vaccination programmes, is based on advice from the Joint Committee on Vaccination and Immunisation (JCVI), an independent Expert Committee of the UK Department of Health.

Vaccination policy has developed over a number of years, in response to recommendations on new vaccination programmes and in response to incidents and outbreaks. The current immunisation programme is managed nationally by Health Protection Scotland, through the Scottish Immunisation Programme.

In terms of the operational delivery of JCVI recommendations, and the delivery of vaccinations in Scotland, this is done through NHS Health Boards. Priorities and targets are communicated via professional guidance/CMO letters to the NHS.

Information on national immunisation programmes, including the timetable of routine childhood immunisations, can be found by visiting http://www.immunisationscotland.org.uk/when-to-immunise/immunisation-schedule.aspx

1.2 Tetanus-containing Vaccines and Human Tetanus Immunoglobulin

Tetanus as a single vaccine is no longer in use and is only available as part of a combined product. Following injury (e.g. wound, burns, compound fractures) selection of the most appropriate tetanus-containing vaccine will depend on the age and immunisation status of the patient. The below chart provides guidance on when to use tetanus-containing vaccines and human tetanus immunoglobulin, and on the selection of the most appropriate vaccine.

1.Assess immunisation status

Immunisation status should be assessed following cleaning of the wound. The UK tetanus immunisation schedule consists of the following:

- Primary immunisation with three doses of tetanus-containing vaccine, at least 1 month apart, usually given at 2, 3 and 4 months of age
- 1st booster dose of tetanus-containing vaccine ideally 3 years after primary course
- 2nd booster dose of tetanus-containing vaccine ideally 10 years after 1st booster

Patients should be considered fully immunised if they have received a total of 5 doses of tetanus-containing vaccine at appropriate intervals.

2.Give tetanus-containing vaccine and/or human tetanus immunoglobulin if required

Immunisation Status	Vaccine	Human tetanus immunoglobulin[2]
Fully immunised (see definition above) or primary immunisation complete, boosters up to date	None required	Give human tetanus immunoglobulin[1] only if high risk tetanus-prone injury (see Box A)
Primary immunisation complete, boosters NOT up to	Required for all injuries: Child under 10 years – give	Give human tetanus immunoglobulin[1] if tetanus-

date	dTaP/IPV[2] (Repevax) or DTaP/IPV/Hib/HepB[2] (Infanrix hexa) Adults and children aged 10 years and over – give Td/IPV (Revaxis)	prone injury (see Box A) *N.B. should be given in a different site from vaccine*
Primary immunisation incomplete/unimmunised or immunisation status unknown/uncertain	Required for all injuries: Child under 10 years – give DTaP/IPV/Hib/HepB[2] (Infanrix hexa) Adults and children aged 10 years and over – give Td/IPV[2] (Revaxis)	Give human tetanus immunoglobulin[1] if tetanus-prone injury (see Box A) *N.B. should be given in a different site from vaccine*
3.Refer (if appropriate) to GP or Public Health for completion of tetanus immunisation		
Primary immunisation now complete and boosters up to date: • No further action required **Primary immunisation incomplete or vaccination status unknown:** • Refer to GP for follow-up and completion of immunisation • If GP details not available refer to NHSGGC Public Health Protection Unit		

[1] Dosage of human tetanus immunoglobulin: 250 units by IM injection. Increase to 500 units if more than 24 hours have elapsed or there is risk of heavy contamination of following burns.

[2] D=diphtheria toxoid; d=diphtheria toxoid (low-dose); T=tetanus toxoid; aP=acellular pertussis vaccine;IPV=inactivated poliomyelitis vaccine; Hib=Haemophilus influenza type b vaccine; hepB= hepatitis B vaccine.

Box A: Tetanus-prone and high risk injuries/groups	
a) Tetanus-prone injuries include: • Wound or burns requiring surgical intervention, if surgery is delayed > 6 hours • Wounds or burns that have a significant degree of devitalised tissue or are puncture-type (particularly when in contact with soil or manure) • Wounds containing foreign bodies • Compound fractures • Wound or burns in patients who have systemic sepsis **b) A wound of burn is considered high risk if:** • There is heavy contamination with material likely to contain tetanus spores (e.g. soil or manure) and/or there is extensive devitalised tissue	**People who inject drugs** People who inject drugs (PwIDs) may be at risk from tetanus-contaminated illicit drugs, particularly when they have sites of focal infection, such as skin abscesses, that may promote growth of anaerobic organisms. Every opportunity should be taken to assess the immunisation status of PwIDs, and to give tetanus-containing vaccine (Revaxis) if immunisation is incomplete or status uncertain.

1.3 Individuals with Uncertain or Incomplete Immunisation

The general principles of vaccination of individuals with uncertain or incomplete immunisation status are:

- Unless there is a reliable vaccine history, individuals should be assumed to be unimmunised and a full course of immunisations planned
- Individuals coming into the UK part way through their immunisation schedule should be transferred onto the UK schedule and immunised as appropriate for age

- If primary course has been started but not completed, continue where left off – NO NEED TO REPEAT DOSES OR RESTART COURSE
- IPV should be used to complete a vaccination course which may have been started with OPV (Oral Polio Vaccine)
- aP should be used to complete a primary course which may have been started with whole cell pertussis vaccine
- MenC/Hib combined vaccine can be used when Hib alone or Hib/MenC is required
- A minimum of one year should be left between DTaP/IPV/Hib/HepB (infanrix hexa) primary course and 1st booster and a minimum of five years should be left between the 1st and 2nd boosters

For further information visit
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/658744/Algorithm_of_individuals_with_uncertain_or_incomplete_vaccine_status.pdf

1.3.1 Administration of more than one live vaccine

In February 2014 the JCVI agreed that guidance to administer two live vaccines on the same day or at a four week interval period should not be generalised to all live vaccines.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/422798/PHE_recommendations_for_administering_more_than_one_live_vaccine_April_2015FINAL_.pdf

1.4 Other Non-Routine Immunisations

1.4.1 Hepatitis B Immunisation of 'At-risk' Infants

There are two groups of babies who are at increased risk of contracting hepatitis B infection:

- Babies of mothers who are chronically infected with hep B virus and
- Babies of mothers not known to be infected but who participate in high risk behaviour, e.g. injecting drug users, sex workers

Mothers are identified during pregnancy and the baby will begin a course of hep B vaccine in hospital, no later than 24hrs after birth. The paediatrician will notify Child health when the first dose of hep B vaccine, together with hep B immunoglobulin, if required, has been given to the baby. This means that the baby can be called and recalled via SIRS for subsequent doses of hep B vaccine to complete the course.

Child Health via SIRS will issue letters to both the GP/health visitor and the parent when the subsequent doses are due (4 weeks, 8 weeks and 1 year old). From late 2017, as hepatitis B is included in the routine childhood immunisation programme, the dose at eight weeks will be provided in DTaP/IPV/Hib/HepB as part of the routine programme, as will additional doses given at 12 and 16 weeks. After the GP/health visitor gives a dose of vaccine and informs Child Health, an automatic letter will be generated when the next dose is due. The system will also generate reminder letters for the GP/health visitor if Child Health has not been informed that the baby has received the 2nd, 3rd or 4th doses of vaccine.

Babies, born to mothers who are chronically infected, who have completed their routine primary immunisations with the hexavalent hepatitis B containing vaccine, do not require a further dose of hepatitis-B containing vaccine at 3 years and 4 months. However the pre-school booster visit (for MMR and DTaP/IPV or dTaP/IPV vaccinations) provides an opportunity to check the child has been appropriately managed, i.e. fully immunised against hepatitis B and tested for infection.

For further information please contact PHPU by tel: 0141 201 4917.

1.4.2 BCG

The programme of BCG vaccination formerly offered to all young people at school was discontinued in 2005. This is because the way TB (tuberculosis) affects the population has changed. When the school BCG programme was put in place in 1953, most cases of TB were in young people. Since that time the number of cases has fallen dramatically, and the disease now mainly affects people with specific risk factors for TB.

Groups recommended for BCG vaccination include:

- Infants and young people under 16 years whose parents or grandparents were born in a country where the annual incidence of TB is 40/100,000 or greater
- Previously unvaccinated new immigrants under 16 years of age from countries where the annual incidence of TB is 40/100,000 or greater
- Contacts of cases known to be suffering from active pulmonary TB

See Green Book chapter 32 for occupational/travel recommendations https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/14851 1/Green-Book-Chapter-32-dh_128356.pdf

The school catch-up campaign organised by NHS Greater Glasgow and Clyde during 2007/08 identified unvaccinated children under 16 who required the BCG. This campaign will not be repeated. Any other children identified as requiring the BCG vaccination should be referred to one of the community clinics.

For further information please contact PHPU by tel: 0141 201 4917.

1.4.3 Travel Health and Travel Clinics

Healthcare professionals can access the TRAVAX website www.travax.scot.nhs.uk for advice on travel health. TRAVAX is a national resource, provided by NHS since 1984, to help healthcare professionals who are advising patients on how to avoid illness when travelling abroad. The site provides detailed information on the illnesses specific to each destination. It is accessed through a log-in address, the registration system is straightforward and the database easy to use.

The public can use the Fit for Travel section at www.fitfortravel.scot.nhs.uk which provides good and updates information and links to a number of other websites including the Foreign and Commonwealth website which gives safety recommendations for travellers.

For further local information re. travel clinics visit
http://www.staffnet.ggc.scot.nhs.uk/Acute/Emergency%20Care%20Med%20Specialities/Infectious%20Diseases/Pages/TravelmedicineClinic.aspx

For information and a list of clinics providing yellow fever vaccination go to
www.hps.scot.nhs.uk

1.5 Consent

1.5.1 Clinicians' responsibilities

- To seek authorisation to proceed with immunisation from parent/guardian/patient at each episode.
- To provide the relevant verbal and written information to the parent/guardian/patient at an appropriate time to allow them to make an informed decision. This should include benefits and risks.
- To obtain consent voluntarily: this means without pressure, deceit or under influence from family, health professionals or others.
- To answer any questions the parent/patient may have about the immunisation. The **Green Book** provides comprehensive information on all vaccines.
- To know that there is no legal requirement for consent to be in writing. Consent may be given in writing, verbally or by co-operation.
- To communicate effectively with other members of the healthcare team any knowledge and information you may have regarding parents/patients desires relating to immunisation.

1.5.2 Parental responsibility

Mothers automatically have parental responsibility. Fathers also have parental responsibility if they were married to the mother when the child was conceived or born or married to her later. An unmarried father who is the natural father can also acquire parental responsibility if named on the birth certificate (births registered on or after 4th May 2006).

The person with parental responsibility need not to be present for immunisation and the child may be brought for example by a childminder or grandparent. The clinician must be satisfied that the circumstances indicate that the person has the necessary authority i.e. the person with parental responsibility has previously indicated that they wish their child to be included in the programme and there is no indication that the parent has negative views of immunisation.

1.5.3 Patients' rights

- Parents or those with parental rights have the right to decide whether their child is immunised.
- Children aged 16 or over are presumed to have decision making capacity.
- Children under the age of 16 have the legal capacity to consent to immunisation where, in the opinion of the clinician, they have the capability of understanding its nature and consequences.
- Children under 16 who do not have the capability to understand, a parent or

adult with parental responsibility can make the decision on their behalf.

- Children over 16 who lack the capacity to make decision regarding immunisation must be treated under Part 5 of the Adults with Incapacity (Scotland) Act 2000.
- Parents/patients have the right to receive verbal and written information of immunisation.
- Parents/patients have the right to change their mind.

For further information see 'NHS Greater Glasgow and Clyde: Consent Policy on Healthcare Assessment, Care and Treatment; March 2011' provides a comprehensive guide to consent.
http://www.staffnet.ggc.scot.nhs.uk/Corporate%20Services/Clinical%20Governance/Key%20Information/Pages/ConsenttoTreatmentPage.aspx

1.6 Scottish Immunisation Recall System (SIRS)

1.6.1 Why SIRS?

The Scottish Immunisation Recall System (SIRS) was introduced to ensure that all pre-school children are invited to receive full courses of all routine primary and booster immunisations. The main benefits are:

a) The automated call and recall of children for immunisation
b) The availability of standard reporting
c) Linkage with other Community and Preventive Care Systems (CPC) – including the Community Health Index (CHI) and the Child Health Surveillance Programme Pre-School (CHSP-PS) and School (CHSP-S)
d) The availability of information for statistical analysis

1.6.2 Who uses SIRS?

The two principal groups of users are the practice staff who administer immunisations and the screening department who facilitate the call/recall process which includes the recording of the immunisation results.

1.6.3 The SIRS child event cycle

This is a standard sequence of events applying to all children who are registered on SIRS from notification of birth.

After a child is registered on SIRS, the 'Health Visitor First Visit Report' (HVFVR) is produced with labels for the 'Family Health Record' and the 'Personal Child Held Record', which are sent to the health visitor attached to the GP practice as notified by the maternity hospital. For areas who have rolled out EMIS, Child Health record the birth details onto EMIS and create an inbound referral to the local admin team, who in turn allocate to a health visitor.

On return of the completed HVFVR form the information is recorded onto the CHSP-PS which automatically updates the mandatory SIRS data fields which includes the SIRS treatment centre number and any exceptions/refusals to immunisation.

Children are then scheduled for immunisation in accordance with a predefined timetable and available practice sessions. The timing and frequency of these sessions is determined by the health care team who are involved in immunisation

and can be changed by writing to Child Health.

Children are given an appointment via a confidential invitation produced by SIRS, which is either sent to the child's home, or sent to the practice for distribution. This informs the parent/carer where, when and what the child is due to attend for. The child's treatment centre receives an immunisation schedule which lists the children appointed and immunisations due.

After the immunisation clinic, the completed schedule should be returned as soon as possible to Child Health where the page will be processed and the child's record updated accordingly on SIRS and in the EMIS record. The child would then be re-scheduled where appropriate to the next available session.

If you have any queries regarding this or any questions about SIRS, please do not hesitate to contact someone in the Child Health Team – Screening Department.

1.7 Patient Group Directions (PGDs)

A Patient Specific Direction (PSD) is always the preferred choice for administration of medicines. A PSD would typically be a prescription written by a healthcare professional qualified as a prescriber e.g. the GP10 form used by GPs.
However, it is not always possible to identify and write prescriptions for patients before they attend a clinic and as it is considered more important that eligible patients are not denied vaccination under national immunisation schemes at a clinic when a prescriber may not be readily available, vaccines are commonly administered under a PGD.

A PGD is defined as a written instruction for the sale, supply and/or administration of named medicines in an identified clinical situation. It applies to group of patients who may not be individually identified before presenting for treatment.

PGDs are LEGAL documents and it is important that the process around the use of these documents is very carefully followed.

Professionals working under a PGD should ensure that:

- They are allowed to work under a PGD
- The document they are working under is in date and that they have a copy of the latest iteration.
- They have read the document thoroughly and understand which patients they can treat under the PGD
- They understand the clinical governance requirements for working with PGDs e.g. appropriate patient records required.
- They are up to date with any specialist skills listed in the PGD
- They thoroughly understand any storage requirements related to the medicines they are administering. This is particularly important for vaccines.

More information about working under PGDs and a list of healthcare professionals who may do so can be found on the NES or MHRA sites. NES has developed a training module 'Patient Group Directions 2015' developed to facilitate the development implementation and audit of Patient Group Directions (PGDs).

Individuals requiring copies of the latest vaccine PGDs should first speak to their clinical lead. If that's not possible or impractical the person responsible for maintaining the most up to date documents is the Prescribing & PGD Administrator Jacqueline Richardson, based at West Glasgow ACH, Dalnair Street, Yorkhill.
Tel. 0141 232 1775. Email jacqueline.richardson@ggc.scot.nhs.uk.

Clinical enquiries about the content of vaccine PGDs should be directed to Pharmacy Public Health or tel. 0141 201 4464

2.0 IMMUNISATION MANAGEMENT

2.1 Accountability and Responsibility

The NMC Standards for Medicines Management 2015 and Code of Professional Conduct indicate the nurse is personally accountable for his/her practice. And when administering medications the nurse must exercise his/her professional judgement and apply his/her knowledge and skill to the given situation.

2.2 Competency Criteria

All staff directly employed by the NHS and subject to Agenda for Change now need to meet the requirements of the Knowledge Skills Framework (KSF) described for their post. Outlined below are how evidencing competence in different elements of immunisation may be utilised against KSF dimensions.

Criteria		
Aware of and can describe current vaccine schedule. (KSF HWB1.2)	Reflect on your clinical decision making in relation to immunisation practice. (KSF core 4.2/5.2)	Work with members of the multi-disciplinary team in relation to immunisation programmes. (KSF core 1.2)
Advise patients with uncertain immunisation history. (KSF core 1.2/HWB2.2)	Evaluate your consultation style with patients/clients in immunisation clinics. (KSF core 4.2/5.2)	Reflect on own practice and identify when support from others is required. (KSF core 3.2)
Demonstrate up to date knowledge of ordering, handling and storage of vaccines. (KSF EF1.2)	Access literature and data about immunisations. (KSF IK3.1)	Provide support and guidance to other professional. (KSF G1.2)
Demonstrate an understanding of the immune system and how vaccines work. (KSF HWB3.2)	Review and monitor your standard of vaccine administration and record keeping. (KSF core 4.2/5.2)	Access and use current PGDs ensuring they are signed by the appropriate people. (KSF core IK3.2)
Demonstrate an understanding of public health aspects of immunisation. (KSF core 3.2/HWB1.2)	Discuss immunisation issues with other professionals. (KSF core 5.2)	Demonstrate ability to identify and manage adverse events, including anaphylaxis. (KSF HWB7.3)

Demonstrate up to date knowledge about professional accountability in relation to administration and recording of immunisations.	Demonstrate knowledge of patient confidentiality in light of current legislation regarding the handling of personal data. (KSF core 6.2/3.2)	Review and monitor your own practice in connection with professional and policy guidelines and immunisation standards. (KSF core 4.2/5.2)
Demonstrate up to date knowledge of the principles of consent and recording in patient records. (KSF IK3.2)		

2.3 Operational Standards for Immunisation Clinics

Regardless of what setting immunisation is being delivered, healthcare staff need to be knowledgeable concerning:

- Documentation
- Resources and equipment
- Preparation of vaccine
- Skin preparation
- Waste disposal

An immunisation clinic checklist (appendix 1) has been developed which can be used when preparing for a clinic.

2.4 Correct Administration of Vaccines and Documentation

2.4.1 Vaccine Administration

The following aspects of immunisation technique are important as when performed correctly they can improve immunogenicity and reduce risk of local reactions:

- Preparation
- Injection technique
- Choice of needle length
- Injection site

In addition, correct and safe disposal of waste and accurate documentation are essential parts of good vaccine technique.

Details of vaccine administration best practice are shown in chapter 4 of the Green Book, with some key features highlighted below.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/147915/Green-Book-Chapter-4.pdf

- To avoid errors and maintain efficacy, vaccines should only be reconstituted and drawn up when required and not before the immunisation session
- Freeze dried vaccines should only be reconstituted using the dilutent supplied and used within specified time. The dilutent should be drawn up using a green (21G) needle and slowly added to vaccine to avoid frothing
- Before injecting the immuniser should check that consent has been given, the correct product, in date and at correct dose, and the colour and composition following final checks should be performed.

- The table below shows the preferred route of administration for common vaccines. Immunisers should refer to the Green Book for details
- Vaccines should not be given intravenously.

Intramuscular*	Subcutaneous	Oral	Intradermal	Intranasal
Most other vaccines	Varicella (N.B. varivax can be given IM or subcut)	Rotavirus	BCG	Fluenz
	Japanese Encephalitis	Cholera		
		Oral typhoid		

*Give via subcutaneous route if patient has bleeding disorder

- It is important the vaccine is injected into muscle and not into fat. This is why the deep subcutaneous route is no longer recommended for most vaccines.
- For IM injection, needle needs to be long enough to ensure vaccine is injected into muscle. A 25mm needle is suitable for most except for pre-term or very small infants when 16mm should be used or for larger adults, where 38mm may be necessary.
- For infants under 1 year, the anterolateral aspect of the thigh is preferred injection site.
- Over age of 1 year the deltoid is preferred site.
- If multiple injections are required at one visit, they should, as far as possible be administered in different limbs. IF this is not possible then injections in the same limb should be 2.5cm apart.
- The buttocks should be avoided due to higher risk of injecting into fat and possibility of sciatic nerve damage.
- The vaccination area should be completely exposed, and if visibly dirty washed with soap and water
- Clean skin does not require further cleaning. Alcohol and other disinfectants can inactivate live vaccines.
- Babies and young people should be sat sideways, securely in the lap of the parent/guardian.
- The technique, as described in the Green Book should be used.
- All Reconstituted vaccines, opened single and multidose vials, empty vials and ampoules and used needles and syringes should be disposed of in appropriate sharps bin, which should be replaced once 2/3 full.

2.4.2 Documentation

The vaccine record is part of the medical record and therefore a legal document. The following information should be recorded accurately:

- Vaccine name, batch number and expiry date
- Dose administered
- Site(s) used – including clear description of which injection was administered in each site, especially where two injections were administered in the same limb
- Date immunisation(s) were given
- Names and signature of vaccinator

This information should be recorded in all three:

- Patient held record or Personal Child Health Record (PHCR) for children (the Red Book)
- Patient's GP record or otherpatient record depending on location
- Child Health Information System

2.5 Vaccine Errors and Reporting

This section deals with vaccine errors, that is, mistakes in the preparation and administration of vaccines. Errors in storage or cold chain failures are dealt with in the 'NHS GGC Vaccine Ordering, Storage and Handling Guideline. Adverse events subsequent to vaccination, such as anaphylaxis, or other side effects are also outside the scope of this guidance section and should be reported through the same mechanisms as adverse events from other medicines. http://www.nhsggc.org.uk/media/244993/vaccine-ordering-storage-and-handling-guideline.pdf)

Vaccine errors may occur in even the most prepared organisations. We need to learn from them, and introduce systems and practices that minimise the risk of errors happening in the future. Learning can only happen in an open and trusting environment. It is therefore important that all vaccine errors are discussed as part of local procedures, which are demonstrated in the flowchart on page 16.

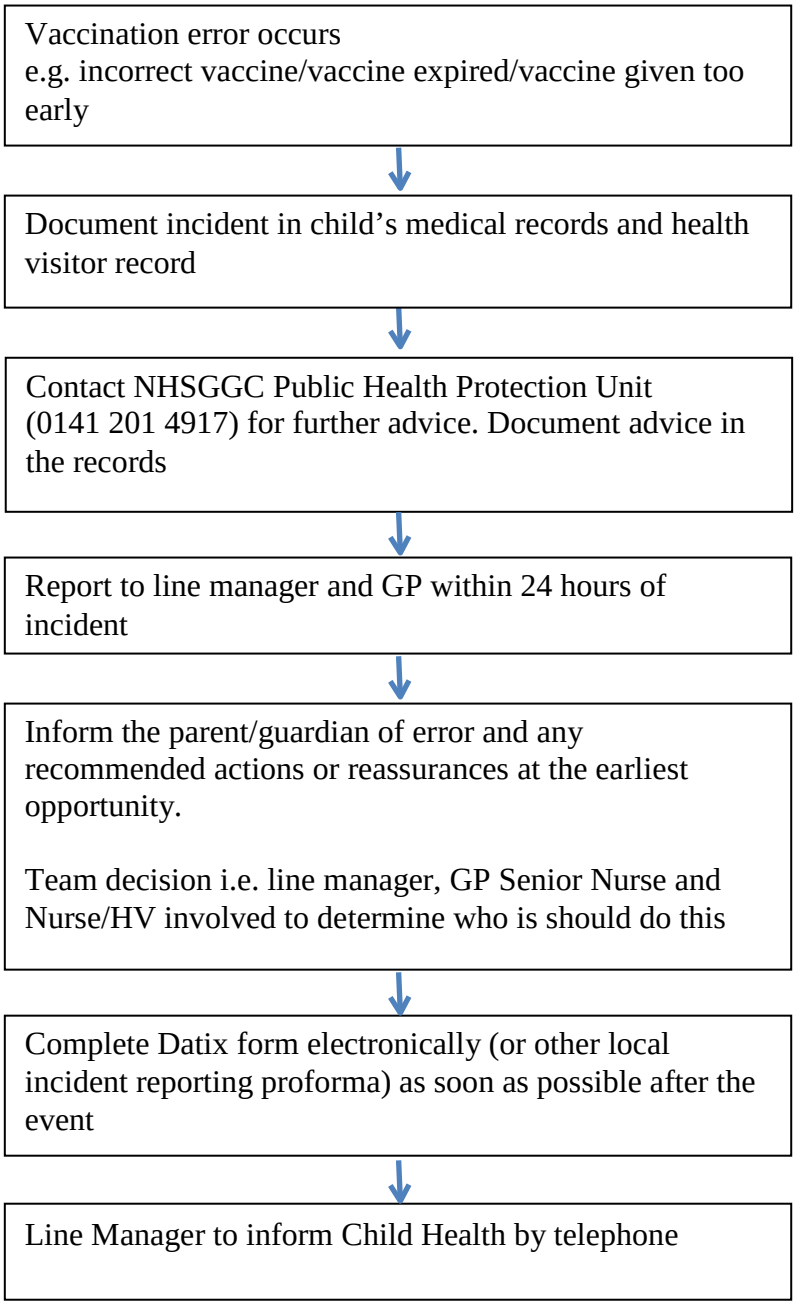
Whilst the majority of vaccine errors will result in no direct harm, it is not possible to "overdose" on vaccines, errors can leave individuals unprotected from infectious disease and have a significant resource burden in follow up, and can reduce the trust and confidence in vaccine programmes.

All vaccine errors should be reported to the Public Health Protection Unit (PHPU) by phone during office hours. When connected please state that you are calling regards a vaccine error, as that will ensure your call is triaged. PHPU staff recognise the distress an error can cause, and will try as far as possible to prioritise your call.

PHPU can help with risk assessment of the error, and provide advice on future vaccination. This advice is based on the Green Book and the national Vaccine Incident Guidance http://www.documents.hps.scot.nhs.uk/immunisation/general/vaccine- incident-guidance-2013-09.pdf as well as the experience and knowledge of the PHPU staff.

If an error is identified by Child Health they will contact the relevant practice to investigate and advice can be sought from PHPU (0141 201 4917).

Flow chart to be followed in the event of a single vaccine error identified in the primary care setting.



Appendix 1.

Immunisation clinic checklist

Part A: Clinic Facilities and Equipment			
Clinic Facilities	**Yes**	**No**	**Comment**
Room has adequate space			
Waiting area has adequate space			
There are staff to support the clinic			
Patient records are available and accessible to review and record in the clinic			
Hand washing facilities are available in the room and meet infection control standards			
Facilities for drawing up and checking vaccines meet infection control standards			
There is a system in place in the event of an adverse reaction, including availability of emergency medicines			
Immunisation supplies are stored in safe and secure environment			
Identified members of staff to be responsible for vaccine stock rotation and cold chain management			
Vaccines are stored and maintained to preserve cold chain			
Vaccine storage is monitored and records are audited			
Sharps disposal containers are accessible			
Part A: Preparation, administration and recording			
Prior to clinic staff delivering immunisation clinic must ensure that vaccines have been maintained in the cold chain e.g. 2-8 degrees			
Check child's vaccination history prior to immunisation			
System is in place to check child is fit and well to be immunised, and that parent/guardian are fully informed to be able to give informed consent			
Staff are aware of correct sites for administration			

of vaccines: a) Anterior-lateral thigh for under 1 year b) Preferably deltoid area of arm for over 1 year, or anterior-lateral thigh *N.B. When 2 vaccines are administered on same limb there must be at least 2.5cm between sites.*			
Name and appearance of vaccine, expiry date and batch number are all checked prior to administration on an individual basis			
Routine practice of vaccines being drawn up for each individual child after screening is being followed			
Staff drawing up vaccine should personally administer the vaccine			
Staff administering vaccine records immunisation. The following information should be recorded accurately on: <u>SIRS:</u> • Vaccine name • Batch number • Expiry date • Date given <u>EMIS/Vision:</u> • vaccine name • batch number • expiry date • site given • electronic signature e.g. MM <u>PHR (Patient Held Record):</u> The vaccine given, date and site can be added in comments box.			
SIRS sheet is sent to Child Health on same day as clinic is held, even if all children failed to attend			