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## VACCINATION AND IMMUNISATION POLICY AND PROCEDURE FOR REGISTERED NURSES

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*This Policy and Procedure has been produced by Barnsley Clinical Commissioning Group and is recommended to be used by General Practice.*

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## **BACKGROUND**

Immunisation is one of the most successful and cost effective health protection interventions and is a cornerstone of public health. High immunisation rates are key to preventing the spread of infectious disease, complications and possible early death among individuals and to protecting the population's health through both individual and herd immunity (this means that individuals who cannot be vaccinated will still benefit from the routine vaccination programme).

Following the implementation of the Health and Social Care Act 2012; The Secretary of State for Health and NHS England agreement (NHS Public Health Functions Agreement 2015-16) enables NHS England to commission certain public health services that will drive improvements in population health, through provision of the services (7A services) of which Vaccination and Immunisation Programmes are included.

**VACCINATION AND IMMUNISATION POLICY AND PROCEDURE FOR REGISTERED NURSES**

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## **VACCINATION AND IMMUNISATION POLICY AND PROCEDURE FOR REGISTERED NURSES**

### **1.0 INTRODUCTION**

- 1.1 This Policy aims to provide a framework for registered nurses working in primary care involved in providing vaccination and immunisation in Barnsley.
- 1.2 This document outlines the Policy for registered nurses administering vaccines in Barnsley, including vaccine storage, consent and management of anaphylaxis.
- 1.3 Up to date SYB PGDs is available from Barnsley CCG website <http://www.barnsleyccg.nhs.uk/members-professionals/medicines-management.htm>
- 1.4 The Policy has been developed by Barnsley Clinical Commissioning Group, Public Health England and NHS England Yorkshire and Humber North Screening and Immunisation Team (Yorkshire and the Humber – South Yorkshire and Bassetlaw).
- 1.5 Each vaccine administrator must have access to the policy, Immunisations against infectious diseases ‘The Green Book’ and other relevant programme information. <https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>

Also GOV.UK immunisation information for health professionals and immunisation practitioners

<https://www.gov.uk/government/collections/immunisation>

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/422787/8584\\_PHE\\_2015\\_Complete\\_Immunisation\\_Schedule\\_A4\\_13\\_accessible.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/422787/8584_PHE_2015_Complete_Immunisation_Schedule_A4_13_accessible.pdf)

<http://www.healthtalk.org/peoples-experiences/pregnancy-children/immunisation/topics>

<http://www.gosh.nhs.uk/medical-information/general-health-advice>

### **2.0 PURPOSE**

- 2.1 The Childhood, adolescent and adult immunisation programmes are supported and endorsed by Barnsley CCG as an integral part of public health nursing.

**2.2** The purpose of this policy is to support the safe administration of vaccination and immunisation in Barnsley to achieve the national immunisation programmes.

### **3.0 DEFINITIONS AND ABBREVIATIONS**

#### **3.1.1 Definitions**

Immunisations provide active immunity against infectious disease. The principal aims of the immunisation are threefold:

- To protect the individual against infectious diseases, with associated reduction in mortality, morbidity and long term consequences.
- To prevent outbreaks of disease through breaking transmission
- Ultimately to eradicate some diseases world-wide.

**3.1.2** A vaccine is a prescription only medicine, and can be administered by a registered nurse in accordance with a prescription from a registered prescriber or by a designated authorised registered nurse under a Patient Group Direction (PGD). Where a nurse is administering a vaccine in accordance with a PGD, the PGD must be legally valid, be specific for each immunisation product or programme, and be signed by the registered nurse working under it, following authorisation by her manager or designated organisational lead. Please also see appendix A and appendix B

#### **3.2 Abbreviations**

The following abbreviations have been used within the Policy.

DOH – Department of Health  
EG – for example  
GP – General Practitioner  
PHE – Public Health England  
IM – Intramuscular (referring to route of injection)  
PDP – Personal Development Portfolio  
PGD – Patient Group Direction  
SC – Subcutaneous (also referring to route of infection)  
NHS – National Health Service  
NMC – Nursing & Midwifery Council  
UK – United Kingdom  
WHO – World Health Organisation

### **4.0 PRINCIPLES**

**4.0.1** The immunisation programme in the UK continues to evolve, thus meeting the demand to improve the control of infectious diseases through vaccination. Vaccines are the safest and most successful public health measure available

for preventing infectious diseases and their associated complications.

- 4.0.2** This Policy provides vaccinating nurses with a framework for undertaking immunisations.
- 4.0.3** Vaccines may be administered in any school or clinical setting or within the home environment. Domiciliary immunisations must be pre-arranged. If the immuniser does not feel confident or safe to offer domiciliary visits alone, the immuniser must be accompanied by a colleague or the immunisation will be deferred.

The principles of this Policy are to;

- 4.0.4** Identify the responsibilities of everyone involved in the vaccination and immunisation process
- 4.0.5** Ensure that adequate information is available for registered nurses trained in vaccination and immunisation to immunise safely and effectively having accurate evidence based information with which to underpin their clinical practice.

#### **4.1 Training**

- 4.1.1** All registered nurses are accountable for their practice and must ensure they undertake the appropriate training to perform the skill in a professional and competent manner.

It is recommended that nurses access vaccination and immunisation training from an NHS England/Health Education England approved provider. Currently the University of Sheffield provide this training which complies with the national training standards provided in the link below.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/362171/National\\_Immun\\_Train\\_Stand1.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/362171/National_Immun_Train_Stand1.pdf)

- 4.1.2** Staff must have a good understanding of all aspects of immunisation as appropriate to their client group including the use, recommended dosage, contraindications and side effects of each vaccine they administer.
- 4.1.3** Registered nurses administering vaccines must have received training in the recognition and treatment of an anaphylaxis and attend mandatory resuscitation update training sessions annually in accordance with the Mandatory Training Policy.

## 4.2 Consent

Vaccine administrators must comply with the information provided in chapter 2 in the Green Book

<https://www.gov.uk/government/publications/consent-the-green-book-chapter-2>

Also The Nursing and Midwifery Council's Code of Professional Conduct  
[www.nmc.org.uk/standards/code/](http://www.nmc.org.uk/standards/code/)

## 4.3 Storage of Vaccines

Vaccine administrators must comply with the information provided in chapter 3 in the Green book and PHE guidance.

<https://www.gov.uk/government/publications/storage-distribution-and-disposal-of-vaccines-the-green-book-chapter-3>

PHE Protocol for ordering, storing and handling vaccines

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/300304/Protocol\\_for\\_ordering\\_storing\\_and\\_handling\\_vaccines\\_March\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/300304/Protocol_for_ordering_storing_and_handling_vaccines_March_2014.pdf)

Keep Your Vaccines Healthy Poster

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/294388/Keep-your-vaccines-healthy-poster-March2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/294388/Keep-your-vaccines-healthy-poster-March2014.pdf)

National Patient Safety Agency: Vaccine cold storage

<http://www.nrls.npsa.nhs.uk/EasySiteWeb/getresource.axd?AssetID=66112%20>

- 4.3.1** All vaccines have a predetermined shelf life, and expiry dates will be clearly marked on the outer packaging of each product. The expiry date is dependent upon the vaccine being stored in the correct manner (as outlined in the Manufacturers Summary of Product Characteristics) and maintenance of the cold chain, throughout the shelf life of the product. Breaks in the cold chain may result in loss of potency of a vaccine and ultimately to vaccine failure. Most vaccines must be kept at temperatures between 2<sup>o</sup> and 8<sup>o</sup>C and nurses should consult the product packaging to ensure vaccines are being stored at the correct temperature
- 4.3.2** The contract with the vaccine supplier should specifically state that vaccines should be delivered under temperature controlled conditions. Vaccines should be placed in the vaccine fridge immediately on delivery. It is also good practice to physically check the labelled storage conditions for each delivery before it is

put away.

- 4.3.3** Care should be taken to avoid over-ordering or stockpiling vaccines. Systems should be developed to ensure stock rotation, and regular checks should be made to remove time expired vaccines. Vaccines should be stored in the refrigerator, allowing air to circulate around the packages. Door opening should be kept to a minimum. Vaccines will be stored and transported within the temperature range of 2°C - 8°C until the point of administration. Vaccines used 'off site' will be transported in a cool box/bag.

Ensure that stock is properly stored and rotated with the shortest expiry date used first and that no vaccines are past the expiry date

- Vaccines will not be stored in the fridge door
- The fridge will be no more than 50% full
- Vaccines will not touch the side, top or back of the fridge

All expired/surplus/damaged vaccines will be disposed of safely (E.g. All unused vaccines will be discarded at the end of a clinic session if they have been kept out of the fridge). Ensure that written procedures for the disposal of vaccines are available locally

- 4.3.4** At least two named persons (one designated and one deputy) will be responsible for ensuring that vaccines are ordered, transported and stored in accordance with current guidelines. In addition, there should be named deputies for periods of absence of named person(s). Training on standard operating procedures for staff handling vaccines should be carried out for these role(s)

Each practice area should have a protocol demonstrating the points addressed in sections 4.4.2 to 4.4.3.

- 4.3.5** A maximum / minimum actual thermometer should be used in fridges where vaccines are stored, and minimum and maximum and average temperatures monitored and recorded at least once daily (ideally before the fridge starts to be used). Temperature records to be kept close to the fridge and organisations/practices escalation process and procedure understood if temperatures are identified outside 2-8°C, including the reporting to PHE/NHS England Screening and Immunisation Team Coordinator and completion of an incident reporting (IR1) form. Staff undergoing cold chain training must ensure they are able to implement their learning into local practice i.e. understanding their local equipment requirements e.g. resetting thermometers after reading,

**4.3.6** Only validated/approved cool-boxes or insulated containers must be used to transport vaccines, these will ensure the required temperature is maintained throughout the period of transit/use. Care should be taken to keep frozen icepacks out of direct contact with the vaccine as this can cause the product to freeze. When being transported, vaccines should be located in the boot of a car.

Ice should not be allowed to build up within the refrigerator, as this reduces effectiveness. Special care should be taken during defrosting to ensure that the temperature of the vaccine does not go outside the specific range. An alternative refrigerator or insulated containers should be used for vaccine storage during defrosting of the main refrigerator. Annual maintenance of vaccine fridges is recommended to ensure thermometers/thermostats are working correctly.

**4.3.7** The vaccines fridge should be lockable or kept in a lockable room. A designated vaccine fridge should be used and this fridge should be specifically designed for this purpose (Domestic fridges should not be used) and should be of an appropriate size for the quantity of stock.

All fridges should ideally have two thermometers, one of which is a maximum/minimum thermometer independent of mains power. However, if only one thermometer is used, then a monthly check should be considered to confirm that the calibration is accurate.

The minimum and maximum temperature of the fridge should be checked and recorded daily with the designated person(s). In addition, the following actions should take place

- Act immediately if the temperature falls outside of the range (+2<sup>0</sup>C to +8<sup>0</sup>C)
- Reset the thermometer after each reading
- The temperature recording sheet should be kept for 5 years

**4.3.8** There should be a service contract in place to cover breakdown/maintenance of the vaccine fridge and there should be a system in place to deal with unforeseen circumstances such as:

- Preventing the electricity supply to the vaccine fridge being turned off accidentally by using a switchless socket or/ and by placing cautionary notices near plugs/ sockets
- A back up vaccine fridge will be available in case of breakdown

**4.3.9** Independent self-audit to be carried out by designated person(s)/ deputies

- Every week: fridge contents should be checked at least once
- Every month: vaccine stock should be audited and recorded
- Every three months: audit records of stock and temperature management can be shared with your local screening and immunisation teams

**4.4 Anaphylaxis**

**4.4.1** Anaphylactic reactions following immunisation are extremely rare but have the potential to be fatal. Onset of anaphylaxis is rapid, typically within minutes, and its clinical course is unpredictable with variable severity and clinical features.

**4.4.2** All health professional responsible for immunisation must be familiar with techniques for resuscitation of a patient with anaphylaxis to prevent disability or loss of life. A protocol for the management of anaphylaxis and an anaphylaxis pack must be available whenever vaccines are given.

**4.4.3** • Refer to CWI 11.4 Anaphylaxis Procedure (2009) in the Clinical Procedure Manual.

**4.5 Documentation**

Accurate and timely recording of vaccinations administered are necessary in order to;

- Ensure that the individual's records are up to date
- For monitoring immunisation uptake within the Barnsley area
- To facilitate the recall of individuals for immunisation as required
- 

**4.5.1** Best practice ensures that the following information is documented this includes the vaccine brand name, dose given, route, site of administration, batch number and expiry date, name and signature of vaccinator, any advice given

**4.5.2** This information should be recorded on the patient's records, patient-held record / Personal Child health Record (The Red Book) where appropriate; GP computer system and Child Health Scheduled / Unscheduled immunisation form (if appropriate)

**4.5.3** Where appropriate a designated person should also complete the vaccine stock book and claim form for reimbursement and item of service payment is appropriate, or ensure the details are passed on to the relevant member of staff.

**4.5.4** All Vaccinations should be highlighted within a patient's records in order to help ascertain an individual's vaccine status at a later stage.

The vaccination and immunisation policy and procedure is committed to the Equality Act 2010 which stated that all public authorities must give due regards in the course of their duties to the need to eliminate discrimination, harassment and victimisation, advance equality of opportunity and foster good relations across the Nine characteristics which are protected by the Act, which are age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, gender and sexual orientation.

## **5.0 ROLES AND RESPONSIBILITIES**

The PHE Screening and Immunisation Team monitor vaccination uptake, coordinate the introduction of new national vaccination programmes including catch-up campaigns, and provide vaccination and immunisation advice to vaccine administrators.

Barnsley Vaccination and Immunisation steering group reviews immunisation uptake administered across Barnsley. They make recommendations and work with Partners to improve uptake and escalate concerns to the Barnsley Health Protection Board and South Yorkshire and Bassetlaw Vaccination and Immunisation Programme Board.

## **6.0 IMMUNISATION SCHEDULES**

This policy covers all child, adolescent and adult vaccinations undertaken in various primary care settings;

1. Routine Childhood Immunisation programme
2. Non routine immunisation for children
3. School based immunisation
4. Influenza / Pneumococcal National Programme
5. Domiciliary Immunisations

### **6.1 Routine Childhood Immunisation programme**

Vaccine administrators to be aware of The National Vaccination programme schedule and information for health care workers

<https://www.gov.uk/government/collections/immunisation>

### 6.1.1 Pre-school Children 0-5 years

Parents will be advised of the Childhood Immunisation programme by the Health Visitor at their initial birth visit, who will continue to promote and encourage parents to attend for immunisations. Appointments for scheduling are sent by the Child Health Department, and in some instances, direct from the GP to the child's home address. Immunisations commence at two months of age. Parents to consent to immunisation at each immunisation appointment.

### 6.1.2 School age children 5-19 years

Administration of vaccinations to 5 to 19 year olds is commissioned to be delivered by either local school nurse teams or vaccination and immunisation teams or through GP service. Vaccine administrators to contact PHE Screening and Immunisation team if uncertain of the commissioning arrangements and providers delivering the programmes.

## 6.2 Non routine/Targeted Immunisation for children

Hepatitis B: The neonatal schedule for post exposure prophylaxis for babies born to Hepatitis B positive mothers. The Screening co-ordinator at BHNFT Maternity service notifies Child Health Records Department, GP Practice and the PHE Screening and Immunisation team (South Yorkshire and Bassetlaw). An initial dose is given prior to discharge from maternity services, with the 2<sup>nd</sup> dose at 1 month, 3<sup>rd</sup> dose at 2 months and 4<sup>th</sup> dose at 12 months, all administered through GP practices. At the 4<sup>th</sup> dose at 12 months it is a local agreement for GP practices to complete a Dried Blood Spot test that is supplied through the PHE Screening and Immunisation team co-ordinator.

It is GP practices responsibility to ensure babies receive timely doses and a completed Dried Blood Spot test at 12 months, with the outcome recorded in the child's clinical record.

Hepatitis B vaccinations can be given at the same time as other vaccinations.

It should be noted Hepatitis B may be given for other reasons e.g. parental lifestyle, household contact, abstinence syndrome or travel – these are not post exposure and do not fall under the remit of the SIT and the notification pathway described in point

BCG Vaccination: Babies identified at risk by a risk assessment completed antenatally by maternity services. Vaccination administered either prior to discharge from maternity services or invited to attend outpatient's appointment

at BHNFT. GP practitioners to view if baby has received BCG if identified at risk when they attend for primary vaccinations at GP practice and escalate them to paediatrics to have the BCG administered if not received.

#### Other vaccines recommended for at risk groups of children and adults

Vaccine administrators to be aware of vaccines required by children and adults in at risk groups including seasonal flu vaccination and pneumococcal vaccination programme

<https://www.gov.uk/government/publications/the-complete-routine-immunisation-schedule>

GP practices are responsible for identifying and offering vaccinations to at risk groups following Green Book guidance

<https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>

### **6.4 Influenza and Pneumococcal Immunisation**

Vaccine administrators to be aware of current National Seasonal Flu Vaccination programme and eligible cohorts

<https://www.gov.uk/government/collections/annual-flu-programme>

Vaccine administrator to contact PHE Screening and Immunisation Team uncertain of the commissioning arrangements and providers delivering the programmes locally.

Health and social care staff employers are responsible for offering and providing flu vaccination to their employees.

### **6.5 Travel vaccines**

Information Links:

<https://www.gov.uk/foreign-travel-advice>

<http://www.fitfortravel.scot.nhs.uk/home.aspx>

<http://www.nathnac.org/travel/index.htm>

<https://www.gov.uk/browse/abroad/passports>

<http://www.travax.scot.nhs.uk/>

<https://www.gov.uk/the-yellow-card-scheme-guidance-for-healthcare->

professionals

<https://www.gov.uk/foreign-travel-advice-for-people-with-mental-health-issues>

## **6.6 Immunisations in response to outbreak**

Providers will engage surge capacity procedures in the event of an outbreak, overseen by the Outbreak Control Team. Clinical guidance to be provided by NHS England with governance and reporting mechanisms via Barnsley Health Protection Board.

### **Domiciliary Immunisations**

Immunisations may be performed in the patient's home. For young children this may be to assist access for those parents unable to attend clinic. For adults who are housebound, domiciliary visits would be arranged to give immunisations such as flu/pneumococcal vaccines. In all cases, the health professional is required to carry their own emergency adrenaline pack and a charged mobile phone. The immuniser should be accompanied by another member of staff if this is their preference.

## **7.0 CLINICAL PROCEDURE**

Individuals giving vaccinations must have received training in the management of anaphylaxis, and must have immediate access to appropriate equipment and emergency support i.e. calls 999. Adrenaline (epinephrine) must always be immediately available. Before any vaccine is given, consent must be obtained and suitability for immunisation must be established with the individual to be vaccinated, or their parent or carer.

### **7.1 Preparation of vaccines**

Each vaccine should be removed from the refrigerator, reconstituted and drawn up individually for each patient in line with manufacturer's instructions. This will reduce the risk of vaccine error, as well as maintaining vaccine efficacy and stability. Vaccines should not be drawn up in advance of an immunisation session.

Different vaccines must not be mixed in the same syringe unless specifically licenced and recommended for such use.

Unless supplied in a prefilled syringe, the diluent should be drawn up using an appropriately sized syringe and green or filter needle, and added slowly to the vaccine to avoid frothing. Using a needle no larger than a green needle ensures that no glass fragments are able to be drawn up from the ampoule

into the syringe.

## 7.2 Prior to administration

Vaccinators should ensure that:

- there are no contraindications to the vaccine(s) being given
- the patient or carer is fully informed about the vaccine(s) to be given and understands the vaccination procedure

the patient or carer is aware of possible adverse reactions (ADRs) and how to treat them

## 7.3 Route and site of administration

Injection technique, choice of needle length and gauge (diameter), and injection site are all important considerations, since these factors can affect both the immunogenicity of the vaccine and the risk of local reactions at the injection site, and are discussed in more detail below. Safety needles should be used for administration wherever possible to reduce the risk of sharps injury (EU Directive).

## 7.4 Route of injection

Always refer to the Green book and Vaccine Summary of Product Characteristics (SPC) for route of administration. Whilst most vaccines are given intramuscular (IM) practitioners should be aware that now a number are given deep subcutaneous (SC), intradermally, intranasally or orally.

For individuals with a bleeding disorder, vaccines normally given by an IM route should be given by deep subcutaneous injection to reduce the risk of bleeding (as per the Green Book).

## 7.5 Suitable sites for vaccination

The site should be chosen so that the injection avoids major nerves and blood vessels. The preferred sites for IM and SC immunisation are the anterolateral aspect of the thigh or the deltoid area of the upper arm. The anterolateral aspect of the thigh is the preferred site for infants under one year old, because it provides a large muscle mass into which vaccines can be safely injected. Practitioners should refer to the Green Book and/or PGD for route/site of administration. Practitioners should refer to the Green Book and / or PGD for route / site of administration

## 7.6 Cleaning the Skin

If the skin is clean, no further cleaning is necessary. Only visibly dirty skin

needs to be washed with soap and water.

It is not necessary to disinfect the skin. Studies have shown that cleaning the skin with isopropyl alcohol reduces the bacterial count, but there is evidence that disinfecting makes no difference to the incidence of bacterial complications of injections (Del Mar *et al.*, 2001; Sutton *et al.*, 1999).

## 7.7 Choice of needle size

For IM and SC injections, the needle needs to be sufficiently long to ensure that the vaccine is injected into the muscle or deep into subcutaneous tissue. Studies have shown that the use of 25mm needles can reduce local vaccine reactogenicity (Diggle *et al.*, 2000, Diggle *et al.*, 2006). The width of the needle (gauge) may also need to be considered. A 23-gauge or 25-gauge needle is recommended for intramuscular administration of most vaccines (Plotkin and Orenstein, 2008).

For intramuscular injections in infants, children and adults, therefore, a 25mm 23G (blue) or 25mm 25G (orange) needle should be used. Only in pre-term or very small infants is a 16mm needle suitable for IM injection. In larger adults, a longer length (e.g. 38mm green) may be required, and an individual assessment should be made (Poland *et al.*, 1997, Zuckerman, 2000). Intradermal injections should only be administered using a 26G, 10mm (brown) needle.

## 7.8 Immunisation procedures Standard UK needle gauges and lengths\*

Brown 26G 10mm (3/8") long

Orange 25G 16mm (5/8") long

Green 21G 38mm (1 1/2") long

Blue 23G 25mm (1") long

- \* UK guidance on best practice in vaccine administration(2001)

## 7.9 Use of multi-dose vials

Some vaccines are specifically provided in multi-dose vials. The length of time that a vial can be used for is specified in the SPC and this should be followed. To avoid cross contamination new needles must be used each time for drawing up from the vial.

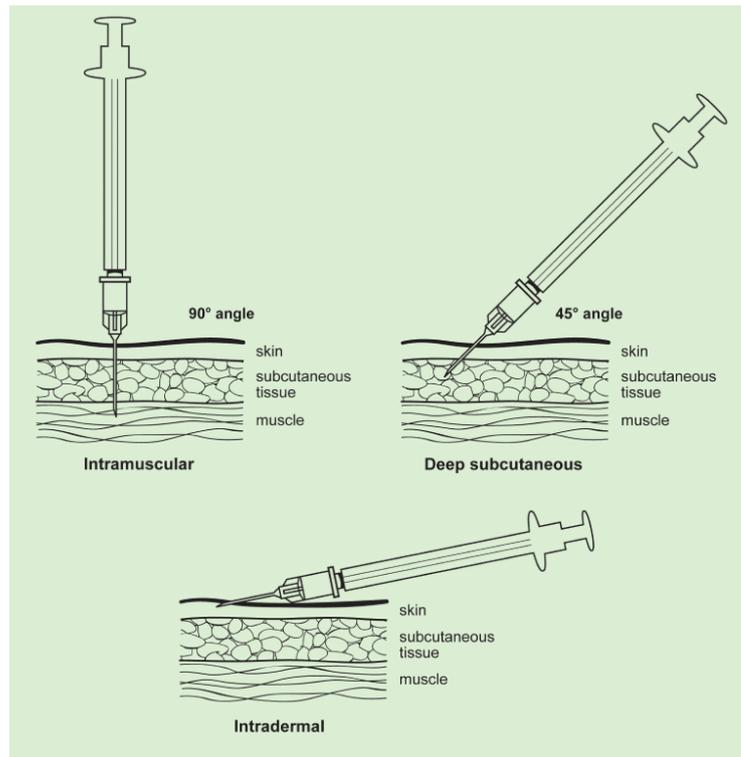


Figure 8.10.1 The three injection techniques

Please refer to chapter 4 of the Green Book:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/147915/Green-Book-Chapter-4.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/147915/Green-Book-Chapter-4.pdf)

Nurses need to be fully aware of needle choice depth of gauge / site / z track methods and it is important they document these as well on medical records

## 8.0 MONITORING THE COMPLIANCE AND EFFECTIVENESS OF THIS POLICY

**8.1.1** Compliance and effectiveness is measured through uptake data (Cover), PHE surveillance data and the number and type of incidents. Childhood immunisation uptake is measured against Public Health Outcomes Framework measures. PHE Screening and Immunisation team (South Yorkshire and Bassetlaw) will monitor uptake and provide advice to individual organisations to optimise uptake. Barnsley Vaccination and Immunisation steering group will review immunisation uptake across Barnsley. They will make recommendations to Partners in relation to improvement of uptake and escalate concerns to the Barnsley Health Protection Board to ensure high level of uptake is maintained. Concerns will also be reported to the SYB Vaccination and Immunisation Programme Board.

**8.1.2** Incidents involving vaccine errors or cold chain failure are to be reported to the PHE Screening and Immunisation team (South Yorkshire and Bassetlaw) co-coordinator in a timely manner. Vaccine wastage must also be reported immediately to ImmForm, without this repeat orders will not be authorised.

Vaccine wastage for Barnsley CCG and SYB will be reported monthly via the Screening and Immunisation Team update. Practices should note the incidents reported and learn lessons where applicable.

**8.1.3** By Improving staff training, addressing 'eligible but not selected' lists, and improving accessibility of immunisations for clients, we are able to positively build up on the already excellent reputation that Barnsley CCG has for its high levels of immunisations update within Barnsley.

**8.2** Incidents involving vaccine error, contamination incidents or any other issue related to immunisation should be reported using the IT1 procedure.

**9.0 REFERENCES - Information links:**

[www.dh.gov.uk/mentalcapacityact](http://www.dh.gov.uk/mentalcapacityact)

[www.immunisation.nhs.net](http://www.immunisation.nhs.net)

<https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>

<https://www.gov.uk/government/collections/immunisation>

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/422787/8584\\_PHE\\_2015\\_Complete\\_Immunisation\\_Schedule\\_A4\\_13\\_accessible.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/422787/8584_PHE_2015_Complete_Immunisation_Schedule_A4_13_accessible.pdf)

<http://www.healthtalk.org/peoples-experiences/pregnancy-children/immunisation/topics>

<http://www.gosh.nhs.uk/medical-information/general-health-advice>

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/362171/National\\_Immun\\_Train\\_Stand1.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/362171/National_Immun_Train_Stand1.pdf)

<https://www.gov.uk/government/publications/consent-the-green-book-chapter-2>

[www.nmc.org.uk/standards/code/](http://www.nmc.org.uk/standards/code/)

<https://www.gov.uk/government/publications/storage-distribution-and-disposal-of-vaccines-the-green-book-chapter-3>

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/300304/Protocol\\_for\\_ordering\\_storing\\_and\\_handling\\_vaccines\\_March\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/300304/Protocol_for_ordering_storing_and_handling_vaccines_March_2014.pdf)

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/294388/Keep-your-vaccines-healthy-poster-March2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/294388/Keep-your-vaccines-healthy-poster-March2014.pdf)

<https://www.gov.uk/government/collections/immunisation>

<https://www.gov.uk/government/publications/the-complete-routine-immunisation-schedule>

<https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>

<https://www.gov.uk/government/collections/annual-flu-programme>

<https://www.gov.uk/foreign-travel-advice>

<http://www.fitfortravel.scot.nhs.uk/home.aspx>

<http://www.nathnac.org/travel/index.htm>

<https://www.gov.uk/browse/abroad/passports>

<http://www.travax.scot.nhs.uk/>

<https://www.gov.uk/the-yellow-card-scheme-guidance-for-healthcare-professionals>

<https://www.gov.uk/foreign-travel-advice-for-people-with-mental-health-issues>

## **10.0 REVIEW OF THIS POLICY**

The policy will be reviewed on a three yearly basis, from the date of approval. However, the Policy may be reviewed earlier than this if new evidence necessitates alterations to the policy to ensure ongoing best clinical practice with Barnsley CCG.