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## PATIENT GROUP DIRECTION (PGD)

Administration of measles, mumps and rubella (MMR) vaccine

Individuals from 12 months of age for routine immunisation, or from 6 months of age if early protection is required, in accordance with the national immunisation programme and PHE guidance for measles post exposure prophylaxis

For the administration of measles, mumps and rubella (MMR) vaccine by currently registered nurses and midwives to individuals from 12 months of age for routine immunisation, or from 6 months of age if early protection is required, in accordance with the national immunisation programme for active immunisation against measles, mumps and/or rubella and PHE guidance for measles post exposure prophylaxis.

Reference no: *MMR PGD*  
Version no: *v01.00*  
Valid from: *22 March 2016*  
Review date: *1 August 2017*  
Expiry date: *28 February 2018*

**Public Health England has developed this PGD for local authorisation by NHS England to facilitate delivery of the national immunisation programme.**

Those using this PGD must ensure that it is formally authorised and signed by a clinical governance or patient safety lead, who has designated responsibility for signing PGDs on behalf of NHS England for their geographical area, so that this document meets legal requirements for a PGD. **THE PGD IS NOT LEGAL OR VALID WITHOUT THIS LOCAL, FORMAL AUTHORISATION.**

Authorising organisations must not alter or amend the *clinical* content of this document (sections 4, 5 and 6); such action will invalidate the *clinical sign-off* with which it is provided. In addition authorising organisations must not alter section 3 'Characteristics of staff'. Only sections 2 and 7 can be amended.

Operation of this PGD is the responsibility of commissioners and service providers.

**THE PRACTITIONER MUST BE AUTHORISED BY NAME, UNDER THE CURRENT VERSION OF THIS PGD BEFORE WORKING ACCORDING TO IT.**

Practitioners and organisations must check that they are using the current version of the PGD. Amendments may become necessary prior to the published expiry date. Current versions of PHE PGD templates for local authorisation can be found from:

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

Any concerns regarding the content of this PGD should be addressed to:

[immunisation@phe.gov.uk](mailto:immunisation@phe.gov.uk)


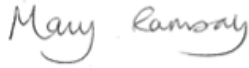

*MMR PGD v01.00 Valid from: 22/03/2016 Expiry: 28/02/2018*

## Change history

Version number	Change details	Date
V01.00	New PHE PGD template	3 March 2016

## 1. PGD template development

This PGD template has been developed by the following on behalf of Public Health England:

Developed by:	Name	Signature	Date
<b>Pharmacist</b> (Lead Author)	Elizabeth Graham Lead Pharmacist Immunisation Services, PHE		03/03/2016
<b>Doctor</b>	Mary Ramsay Consultant Epidemiologist and Head of Immunisation, Hepatitis & Blood Safety Department, PHE		03/03/2016
<b>Registered Nurse</b>	David Green Nurse Consultant – Immunisations, PHE		22/03/2016

This PGD template has been peer reviewed by the PHE Immunisations PGD Expert Panel in accordance with PHE PGD Policy. It has been ratified by PHE Medicines Management Group and PHE Quality and Clinical Governance Steering Group.

## Acknowledgements

Name	Designation
Michael Edelstein	Consultant Epidemiologist (acting-up), Immunisation, Hepatitis and Blood Safety Department, Public Health England
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Sue Mulvenna	Pharmacist Lead - NHS England South West
Graham Munslow	Clinical Screening and Immunisation Manager, NHS England Lancashire & Greater Manchester / Public Health England.
Sharon Webb	Programme Manager - IDPS , NHS Screening Programmes, Public Health England (Midwife)

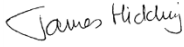
## 2. Organisational authorisations

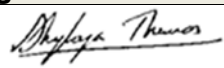

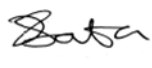
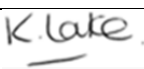
The PGD is not legally valid until it has had the relevant organisational authorisation.

It is the responsibility of the organisation that has legal authority to authorise the PGD, to ensure that all legal and governance requirements are met. The authorising body accepts governance responsibility for the appropriate use of the PGD.

**NHS England - Midlands and East (East)** authorise this PGD for use by the services or providers listed below:

Authorised for use by the following organisations and/or services
All NHS England - Midlands and East (East) commissioned immunisation services
Covering Cambridgeshire, Peterborough, Norfolk, Suffolk, Essex, Southend-on-Sea and Thurrock local authorities.
Limitations to authorisation
None

Organisational approval (legal requirement)			
Role	Name	Sign	Date
Deputy Medical Director	Dr. James Hickling		31.03.16

Additional signatories according to locally agreed policy			
Role	Name	Sign	Date
Screening and Immunisation Lead	Dr. Shylaja Thomas		30.03.16
Pharmacist	Paul Duell		30.03.16
Screening and Immunisation Manager	Debbie Saban		30.03.16
Screening and Immunisation Coordinator	Dr. Karen Lake		30.03.16

Local enquiries regarding the use of this PGD may be directed to: For **East Anglia** email: Dr. Karen Lake [karenlake1@nhs.net](mailto:karenlake1@nhs.net) For **Essex** email [england.essexatimms@nhs.net](mailto:england.essexatimms@nhs.net)

Organisations must add an individual practitioner authorisation sheet or list of authorised practitioners. This varies according to local policy but this should be a signature list or an individual agreement as included at the end of this PGD.

### 3. Characteristics of staff

<p><b>Qualifications and professional registration</b></p>	<p>Registered professional with one of the following bodies:</p> <ul style="list-style-type: none"> <li>• nurse or midwife currently registered with the Nursing and Midwifery Council (NMC)</li> </ul>
<p><b>Additional requirements</b></p>	<p>Additionally practitioners:</p> <ul style="list-style-type: none"> <li>• must be authorised by name as an approved practitioner under the current terms of this Patient Group Direction before working to it</li> <li>• must have undertaken appropriate training for working under PGDs for supply/administration of medicines</li> <li>• must be competent in the use of PGDs (see <a href="#">NICE Competency framework</a> for health professionals using patient group directions)</li> <li>• must be familiar with the vaccine product and alert to changes in the Summary of Product Characteristics, Immunisation Against Infectious Disease (“<a href="#">The Green Book</a>”), and national and local immunisation programmes</li> <li>• must have undertaken training appropriate to this PGD as required by local policy and in line with the <a href="#">National Minimum Standards for Immunisation Training (2005)</a></li> <li>• must be competent to undertake immunisation and to discuss issues related to immunisation</li> <li>• must be competent in the handling and storage of vaccines, and management of the “cold chain”</li> <li>• must be competent in the recognition and management of anaphylaxis</li> <li>• must have access to the Patient Group Direction and associated online resources</li> <li>• should fulfil any additional requirements defined by local policy</li> </ul> <p><b>THE PRACTITIONER MUST BE AUTHORISED BY NAME, UNDER THE CURRENT VERSION OF THIS PGD BEFORE WORKING ACCORDING TO IT.</b></p>
<p><b>Continued training requirements</b></p>	<p>Practitioners must ensure they are up to date with relevant issues and clinical skills relating to immunisation and management of anaphylaxis, with evidence of appropriate Continued Professional Development (CPD).</p> <p>Practitioners should be constantly alert to any subsequent recommendations from Public Health England and/or NHS England and other sources of medicines information.</p> <p>Note: The most current national recommendations should be followed but a Patient Specific Direction (PSD) may be required to administer the vaccine in line with updated recommendations that are outside the criteria specified in this PGD.</p>

#### 4. Clinical condition or situation to which this PGD applies

<p><b>Clinical condition or situation to which this PGD applies</b></p>	<p>Indicated for the active immunisation of individuals from 12 months of age for routine immunisation, or from 6 months of age if early protection is required, for the prevention of measles, mumps and/or rubella in accordance with the national immunisation programme, PHE guidance for measles post exposure prophylaxis and recommendations given in <a href="#">Chapter 21</a>, <a href="#">Chapter 23</a> and <a href="#">Chapter 28</a> of Immunisation Against Infectious Disease: “The Green Book”.</p>
<p><b>Criteria for inclusion</b></p>	<p>Individuals who:</p> <ul style="list-style-type: none"> <li>• are aged 12 months or older and are incompletely or un-immunised with MMR vaccine or of unknown vaccination status</li> <li>• are between 6 months and 12 months of age and early protection is considered necessary eg due to travel or outbreak</li> <li>• are aged 6 months and over and vaccination is indicated for measles post-exposure prophylaxis in accordance with PHE recommendations</li> <li>• are a post-natal rubella seronegative woman or a post-natal woman lacking two documented doses of MMR (Note: routine serological antenatal rubella susceptibility screening will cease on 31.3.16)</li> </ul>
<p><b>Criteria for exclusion<sup>1</sup></b></p> <p>Continued over page</p>	<p>Individuals for whom no valid consent has been received.</p> <p>Individuals who:</p> <ul style="list-style-type: none"> <li>• are less than 12 months of age unless early protection is required</li> <li>• are less than 6 months of age</li> <li>• have had a confirmed anaphylactic reaction to a previous dose of any measles, mumps or rubella containing vaccine or to any components of the vaccine, these may include neomycin or gelatin (refer to relevant SPC)</li> <li>• have a primary or acquired immunodeficiency state (see “The Green Book” <a href="#">Chapter 6</a> for more detail). Note: Where there is doubt over the degree of immunosuppression or a relatively severe immunodeficiency is present, it is important to obtain individual specialist advice.</li> <li>• are on current or recent immunosuppressive or biological therapy (see “The Green Book” <a href="#">Chapter 6</a> for more detail)</li> <li>• are known to be pregnant</li> <li>• have evidence of a current unstable neurological condition, including poorly controlled epilepsy, unless they have been assessed by an appropriate specialist and deemed fit for immunisation</li> <li>• have received measles, mumps and/or rubella containing vaccine in the preceding 4 weeks</li> <li>• have received varicella, zoster or yellow fever vaccine in the preceding 4 weeks, unless protection against measles is required rapidly</li> <li>• have received blood products, such as immunoglobulins, in the preceding 3 months, unless protection against measles is required rapidly</li> <li>• are awaiting reading of a tuberculin (Mantoux) skin test, unless protection against measles is required rapidly</li> </ul>

<sup>1</sup> Exclusion under this Patient Group Direction does not necessarily mean the medication is contraindicated, but it would be outside its remit and another form of authorisation will be required

<p><b>Criteria for exclusion</b> continued</p>	<ul style="list-style-type: none"> <li>• are suffering from acute severe febrile illness (the presence of a minor infection is not a contraindication for immunisation)</li> </ul>
<p><b>Cautions including any relevant action to be taken</b></p>	<p>If idiopathic thrombocytopenic purpura (ITP) has occurred within six weeks of the first dose of MMR, then blood should be taken and tested for measles, mumps and rubella antibodies before a second dose is given. Serum should be sent to PHE National Infection Service Virus Reference Department (Colindale), which offers free, specialised serological testing for such children. If the results suggest incomplete immunity against measles, mumps or rubella, then a second dose of MMR is recommended.</p> <p>Fainting is relatively common when vaccinating adults and adolescents, but infants and children rarely faint. Sudden loss of consciousness in young children should be presumed to be an anaphylactic reaction, particularly if a strong central pulse is absent. A strong central pulse persists during a faint or seizure.</p>
<p><b>Action to be taken if the patient is excluded</b></p> <p>Continued over page</p>	<p>If aged less than 12 months and early protection is not required, advise to return for routine immunisation when the child is 12 months of age and give an appropriate appointment where possible.</p> <p>If aged less than 6 months, MMR vaccine is not indicated. Seek advice regarding post-exposure prophylaxis as immunoglobulin may be indicated – a PSD will be required.</p> <p>Individuals who are pregnant should be advised to avoid contact with known or suspected cases of measles, mumps and rubella infection and report any rash illness or contact with rash illness to their GP and/or midwife. Women who are rubella seronegative or lacking two documented doses of MMR should be immunised after their pregnancy, at the earliest opportunity and before any further pregnancies. Note: MMR can be given to breast-feeding mothers without any risk to their baby.</p> <p>Individuals who have evidence of current neurological deterioration, including poorly controlled epilepsy, immunisation should be deferred until the condition has resolved or stabilised. Note: The presence of a neurological condition is not a contraindication to immunisation. Children with a personal or close family history of seizures should be given MMR vaccine. Advice about likely timing of any fever and management of a fever should be given. Doctors and nurses should seek specialist paediatric advice rather than refuse immunisation.</p> <p>Individuals who have a primary or acquired immunodeficiency state or who are currently, or were recently, on immunosuppressive or biological therapy (see <a href="#">Chapter 6</a>): consult appropriate specialist regarding the individual's immune status and suitability for receiving live MMR vaccine. Administration may be indicated in some cases – a PSD will be required.</p> <p>Individuals who have been immunised against MMR, varicella, zoster or yellow fever within the last 4 weeks, or received blood products in the preceding 3 months, defer immunisation until appropriate interval (see Dose and Drug Interactions section respectively).</p> <p>Individuals who are awaiting reading of a tuberculin (Mantoux), MMR should be delayed until the skin test has been read unless protection against measles is required urgently.</p> <p>Seek appropriate advice from the local Screening and Immunisation Team, a Consultant in Health Protection or the individual's clinician</p>

<p><b>Action to be taken if the patient is excluded</b> continued</p>	<p>where appropriate as a PSD may be indicated.</p> <p>The risk to the individual of not being immunised must be taken into account.</p> <p>Document the reason for exclusion and any action taken in the individual's clinical records.</p> <p>In a GP practice setting, inform or refer to the GP or a prescriber as appropriate.</p> <p><b>Temporary exclusion</b> In case of postponement due to acute severe febrile illness, advise when the individual can be vaccinated and ensure another appointment is arranged.</p>
<p><b>Action to be taken if the patient or carer declines treatment</b></p>	<p>Informed consent, from the individual or a person legally able to act on the person's behalf, must be obtained for each administration.</p> <p>Advise the individual/parent/carer about the protective effects of the vaccine, the risks of infection and potential complications.</p> <p>Document advice given and the decision reached.</p> <p>In a GP practice setting, inform or refer to the GP as appropriate.</p>
<p><b>Arrangements for referral for medical advice</b></p>	<p>As per local policy</p>



## 5. Description of treatment

<b>Name, strength &amp; formulation of drug</b>	Measles, mumps and rubella vaccine (live) Eg: <ul style="list-style-type: none"> <li>• Priorix<sup>®</sup>, powder and solvent for solution for injection in a pre-filled syringe</li> <li>• MMRVaxPRO<sup>®</sup>, powder and solvent for suspension for injection in a pre-filled syringe</li> </ul>
<b>Legal category</b>	Prescription only medicine (POM)
<b>Black triangle▼</b>	No
<b>Off-label use</b>	Administration to infants between 6 months and 9 months of age is off-label in accordance with PHE <a href="#">guidance for measles post exposure prophylaxis</a> and recommendations given in <a href="#">Chapter 21</a> , <a href="#">Chapter 23</a> and <a href="#">Chapter 28</a> of Immunisation Against Infectious Disease: “The Green Book”.
<b>Route / method of administration</b>	<p>The vaccine <b>must be reconstituted</b> in accordance with the manufacturer’s instructions prior to administration.</p> <p>Administer by <b>intramuscular injection</b>. The deltoid region of the upper arm may be used in individuals over one year of age.</p> <p>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.</p> <p>For individuals with a bleeding disorder, vaccines normally given by an intramuscular route should be given by deep subcutaneous injection to reduce the risk of bleeding (see “The Green Book” <a href="#">Chapter 4</a>).</p> <p>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.</p> <p>The vaccine’s Summary of Product Characteristics (SPC) provides further guidance on administration and is available from the electronic Medicines Compendium website: <a href="http://www.medicines.org.uk">www.medicines.org.uk</a></p>
<b>Dose and frequency of administration</b>  continued over page	Single 0.5ml dose per administration. <b>Routine childhood immunisation schedule</b> A total of two doses of 0.5ml provided at the recommended interval (see below): <ul style="list-style-type: none"> <li>• the first dose should routinely be given at 12 months of age</li> <li>• the second dose is routinely scheduled before school entry at three years four months of age</li> </ul> <p>Note: The second dose can be given at any time from three months after the first dose to complete the course. Allowing three months between doses is likely to maximise the response rate, particularly in young children under the age of 18 months where maternal</p>

<p><b>Dose and frequency of administration</b> (continued)</p>	<p>antibodies may reduce the response to vaccination.</p> <p><b>Incomplete immunisation history</b></p> <p>Individuals aged 18 months and over who have not received MMR should receive two doses at least one month apart.</p> <p>An individual who has already received one dose of MMR should receive a second dose to ensure that they are protected.</p> <p>See the <a href="#">vaccination of individuals with uncertain or incomplete immunisation status</a> flow chart.</p> <p><b>Early vaccination due to travel, outbreak or contact with a probable or confirmed case of measles</b></p> <p>The MMR vaccine can be given from 6 months of age when early protection is required.</p> <p>The response to MMR in infants is sub-optimal where the vaccine has been given before 1 year of age. If a dose of MMR is given before the first birthday, then this dose should be ignored. Two further doses of MMR should be given at the recommended ages in accordance with the routine schedule (ie at 12 months of age and a pre-school booster).</p> <p>Children who are travelling to epidemic or endemic areas, or who are a contact with a probable or confirmed case of measles, who have received one dose of MMR at the routine age should have the second dose brought forward to at least one month after the first. If the child is under 18 months of age and the second dose is given within three months of the first dose, then the routine pre-school dose (a third dose) should be given in order to ensure full protection.</p>
<p><b>Duration of treatment</b></p>	<p>Two doses of 0.5ml at the recommended interval (see above).</p> <p>Note: Ignoring any doses administered before the first birthday and any second doses given within 3 months of the first dose when under 18 months of age</p>
<p><b>Quantity to be supplied / administered</b></p>	<p>Single 0.5ml dose per administration.</p>
<p><b>Supplies</b></p>	<p>Centrally purchased vaccines for the national immunisation programme for the NHS can only be ordered via ImmForm. Vaccines for use for the national immunisation programme are provided free of charge.</p>
<p><b>Storage</b></p>	<p>Store in a refrigerator at +2°C to +8°C. Store in original packaging in order to protect from light. Do not freeze.</p> <p>After reconstitution, the vaccine should be administered promptly or allowed to stand in a refrigerator (+2°C to +8°C) and used within 8 hours of reconstitution. If not used after this time it should be discarded.</p>
<p><b>Disposal</b></p>	<p>Equipment used for immunisation, including used vials, ampoules, or discharged vaccines in a syringe or applicator, should be disposed of at the end of a session by sealing in a proper, puncture-resistant 'sharps' box, according to local authority regulations and guidance in the <a href="#">technical memorandum 07-01</a>: Safe management of healthcare waste (Department of Health, 2013).</p>

<p><b>Drug interactions<sup>2</sup></b></p> <p>Continued over page</p>	<p>Immunological response may be diminished in those receiving immunosuppressive treatment.</p> <p>May be given at the same time as inactivated vaccines or at any interval before or after.</p> <p>MMR may attenuate the response to other live vaccines. <a href="#">The revised recommendations for the administration of more than one live vaccine</a> should be followed. These are summarised in the table below.</p> <p>Table: Recommendations for giving more than one live attenuated vaccine in current use in the UK</p> <table border="1" data-bbox="549 555 1447 1323"> <thead> <tr> <th data-bbox="549 555 895 607">Vaccine combinations</th> <th data-bbox="895 555 1447 607">Recommendations</th> </tr> </thead> <tbody> <tr> <td data-bbox="549 607 895 779">Yellow Fever and MMR</td> <td data-bbox="895 607 1447 779">A four week minimum interval period should be observed between the administration of these two vaccines. Yellow Fever and MMR should <b>not</b> be administered on the same day.</td> </tr> <tr> <td data-bbox="549 779 895 913">Varicella (and zoster) vaccine and MMR</td> <td data-bbox="895 779 1447 913">If these vaccines are not administered on the same day, then a four week minimum interval should be observed between vaccines.</td> </tr> <tr> <td data-bbox="549 913 895 1182">Tuberculin skin testing (Mantoux) and MMR</td> <td data-bbox="895 913 1447 1182">If a tuberculin skin test has already been initiated, then MMR should be delayed until the skin test has been read unless protection against measles is required urgently. If a child has had a recent MMR, and requires a tuberculin test, then a four week interval should be observed.</td> </tr> <tr> <td data-bbox="549 1182 895 1323">All currently used live vaccines<sup>3</sup> and tuberculin (Mantoux) skin testing.</td> <td data-bbox="895 1182 1447 1323">Apart from those combinations listed above, these live vaccines can be administered at any time before or after each other.</td> </tr> </tbody> </table> <p>Where protection against measles is required rapidly then the vaccines should be given at any interval. As the response may be suboptimal if given within 4 weeks of previous yellow fever, varicella or zoster vaccine, an additional dose of MMR should be considered.</p> <p>If protection against measles is urgently required, then the benefit of protection from the vaccine outweighs the potential interference with a tuberculin test. In this circumstance, the individual interpreting the negative tuberculin test should be made aware of the recent MMR vaccination when considering how to manage that individual.</p> <p>When MMR is given within three months of receiving blood products, such as immunoglobulin, the response to the measles component may be reduced. This is because such blood products may contain significant levels of measles-specific antibody, which could then prevent vaccine virus replication. Where possible, MMR should be given at least three weeks before or deferred until three months after receipt of such products. If immediate measles protection is required in someone who has recently received a blood product, MMR</p>	Vaccine combinations	Recommendations	Yellow Fever and MMR	A four week minimum interval period should be observed between the administration of these two vaccines. Yellow Fever and MMR should <b>not</b> be administered on the same day.	Varicella (and zoster) vaccine and MMR	If these vaccines are not administered on the same day, then a four week minimum interval should be observed between vaccines.	Tuberculin skin testing (Mantoux) and MMR	If a tuberculin skin test has already been initiated, then MMR should be delayed until the skin test has been read unless protection against measles is required urgently. If a child has had a recent MMR, and requires a tuberculin test, then a four week interval should be observed.	All currently used live vaccines <sup>3</sup> and tuberculin (Mantoux) skin testing.	Apart from those combinations listed above, these live vaccines can be administered at any time before or after each other.
Vaccine combinations	Recommendations										
Yellow Fever and MMR	A four week minimum interval period should be observed between the administration of these two vaccines. Yellow Fever and MMR should <b>not</b> be administered on the same day.										
Varicella (and zoster) vaccine and MMR	If these vaccines are not administered on the same day, then a four week minimum interval should be observed between vaccines.										
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All currently used live vaccines <sup>3</sup> and tuberculin (Mantoux) skin testing.	Apart from those combinations listed above, these live vaccines can be administered at any time before or after each other.										

<sup>2</sup> Refer to British National Formulary (BNF) and Summary of Product Characteristics (SPC) for complete list

<sup>3</sup> Currently used live vaccines are BCG, rotavirus, live attenuated influenza vaccine (LAIV), oral typhoid vaccine, yellow fever, varicella, zoster and MMR

<b>Drug interactions</b> (continued)	vaccine should still be given. To confer longer-term protection, MMR should be repeated after three months.
<b>Identification &amp; management of adverse reactions<sup>4</sup></b>	<p>The most common adverse reactions are fever and injection site reactions including pain, swelling and erythema.</p> <p>Malaise, fever and/or a rash may occur, most commonly about a week after immunisation, and last about two to three days. In studies parotid swelling occurred in about 1% of children of all ages up to four years, usually in the third week.</p> <p>Events due to the measles component occur six to eleven days after vaccination. Events due to the mumps and rubella components usually occur two to three weeks after vaccination but may occur up to six weeks after vaccination. Individuals with vaccine-associated symptoms are not infectious to others.</p> <p>Adverse reactions are considerably less common after a second dose of MMR vaccine than after the first dose.</p> <p>Hypersensitivity reactions and anaphylaxis can occur but are very rare.</p> <p><b>Rare and more serious events</b></p> <p>Febrile seizures are the most commonly reported neurological event following measles immunisation. Seizures occur during the sixth to eleventh day in 1 in 1000 children vaccinated with MMR.</p> <p>Arthropathy (arthralgia or arthritis) has also been reported to occur rarely after MMR immunisation, probably due to the rubella component. If it is caused by the vaccine, it should occur between 14 and 21 days after immunisation. Where it occurs at other times, it is highly unlikely to have been caused by vaccination.</p> <p>ITP has occurred rarely following MMR vaccination, usually within six weeks of the first dose and resolves spontaneously. The risk of developing ITP after MMR vaccine is much less than the risk of developing it after infection with wild measles or rubella virus (see Cautions).</p> <p>Further details on adverse reactions following MMR vaccine can be found in “The Green Book” <a href="#">Chapter 21</a>, <a href="#">Chapter 23</a> and <a href="#">Chapter 28</a>.</p> <p>A detailed list of adverse reactions is available in the vaccine’s Summary of Product Characteristics, which is available from the electronic Medicines Compendium website: <a href="http://www.medicines.org.uk">www.medicines.org.uk</a></p>
<b>Reporting procedure of adverse reactions</b>	<p>Healthcare professionals and patients/carers are encouraged to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme on: <a href="http://yellowcard.mhra.gov.uk">http://yellowcard.mhra.gov.uk</a></p> <p>Any adverse reaction to a vaccine should be documented in the individual’s record and the individual’s GP should be informed.</p>

<sup>4</sup> Refer to British National Formulary (BNF) and Summary of Product Characteristics (SPC) for complete list

<p><b>Written information to be given to patient or carer</b></p>	<p>Offer marketing authorisation holder's patient information leaflet (PIL) provided with the vaccine.</p> <p>Immunisation promotional material may be provided as appropriate:</p> <ul style="list-style-type: none"> <li>• <a href="#">Immunisations at 12 months of age</a></li> <li>• <a href="#">Pre-school immunisations: guide to vaccinations (2 to 5 years)</a></li> </ul> <p>Available from: <a href="http://www.gov.uk/government/collections/immunisation">www.gov.uk/government/collections/immunisation</a></p>
<p><b>Patient advice / follow up treatment</b></p>	<p>Inform the individual/carer of possible side effects and their management.</p> <p>Advise where relevant that pregnancy should be avoided for 1 month post vaccination.</p> <p>The individual/carer should be advised to seek medical advice in the event of an adverse reaction.</p> <p>When administration is postponed advise the individual/carer when to return for vaccination.</p>
<p><b>Special considerations / additional information</b></p> <p>Continued over page</p>	<p>Ensure there is immediate access to adrenaline (epinephrine) 1 in 1000 injection and access to a telephone at the time of vaccination.</p> <p>Recent data suggest that anaphylactic reactions to MMR vaccine are not associated with hypersensitivity to egg antigens. All children with egg allergy should receive the MMR vaccination as a routine procedure in primary care.</p> <p>MMRVaxPRO<sup>®</sup> (Sanofi Pasteur MSD) contains porcine gelatine. Priorix<sup>®</sup> (GSK) does NOT contain porcine gelatine and can be offered as an alternative to MMRVaxPRO<sup>®</sup>.</p> <p>MMR vaccine is recommended when protection against measles, mumps and/or rubella is required. MMR vaccine can be given irrespective of a history of measles, mumps or rubella infection or vaccination. There are no ill effects from vaccinating those who are already immune. If there is doubt about an individual's MMR immune status, MMR vaccine should still be given.</p> <p>Children with chronic conditions such as cystic fibrosis, congenital heart or kidney disease, failure to thrive or Down's syndrome are at particular risk from measles infection and should be immunised with MMR vaccine.</p> <p>MMR vaccine can be provided to children and adults of any age over 6 months using this PGD. The decision on when to vaccinate adults needs to take into consideration the past vaccination history, the likelihood of an individual remaining susceptible and the future risk of exposure and disease see "The Green Book" <a href="#">Chapter 21</a>, <a href="#">Chapter 23</a> and <a href="#">Chapter 28</a>.</p> <p>Entry into college, university or other higher education institutions, prison or military service provides an opportunity to check an individual's immunisation history. Those who have not received MMR should be offered appropriate MMR immunisation.</p> <p>Children coming from developing countries will probably have received a measles-containing vaccine in their country of origin but may not have received mumps or rubella vaccines. Unless there is a reliable history of appropriate immunisation, individuals should be assumed to be unimmunised.</p>

<p><b>Special considerations / additional information</b> (continued)</p>	<p><b>Post Exposure</b></p> <p>Antibody responses to the rubella and mumps components of MMR vaccine do not develop soon enough to provide effective prophylaxis after exposure to these infections. However, as vaccine-induced measles antibody develops more rapidly than that following natural infection, MMR vaccine should be used to protect susceptible contacts from suspected measles. To be effective against this exposure, vaccine must be administered very promptly, ideally within three days.</p> <p>Even where it is too late to provide effective post-exposure prophylaxis with MMR, the vaccine can provide protection against future exposure to all three infections. Therefore, contact with suspected measles, mumps or rubella provides a good opportunity to offer MMR vaccine to previously unvaccinated individuals.</p> <p>If the individual is already incubating measles, mumps or rubella, MMR vaccination will not exacerbate the symptoms. In these circumstances, individuals should be advised that a measles, mumps or rubella-like illness occurring shortly after vaccination is likely to be due to natural infection.</p> <p>Immunoglobulin may be indicated for contacts of measles who are infants, immunosuppressed or pregnant and rubella contacts who are pregnant. Provision of immunoglobulin is not covered by this PGD.</p>
<p><b>Records</b></p>	<p>Record:</p> <ul style="list-style-type: none"> <li>• that valid informed consent was given</li> <li>• name of individual, address, date of birth and GP with whom the individual is registered</li> <li>• name of immuniser</li> <li>• name and brand of vaccine</li> <li>• date of administration</li> <li>• dose, form and route of administration of vaccine</li> <li>• quantity administered</li> <li>• batch number and expiry date</li> <li>• anatomical site of vaccination</li> <li>• advice given, including advice given if excluded or declines immunisation</li> <li>• details of any adverse drug reactions and actions taken</li> <li>• supplied via Patient Group Direction (PGD)</li> </ul> <p>Records should be signed and dated (or a password controlled immunisers record on e-records).</p> <p>All records should be clear, legible and contemporaneous.</p> <p>This information should be recorded in the individual's GP record. Where vaccine is administered outside the GP setting appropriate health records should be kept and the individual's GP informed.</p> <p>The local Child Health Information Systems team (Child Health Records Department) must be notified using the appropriate documentation/pathway when vaccine is administered to individuals under 19 years of age.</p> <p>A record of all individuals receiving treatment under this PGD should also be kept for audit purposes in accordance with local policy.</p>

## 6. Key references

<b>Key references</b>	<b>MMR vaccine</b> <ul style="list-style-type: none"><li>• Immunisation Against Infectious Disease: The Green Book <a href="#">Chapter 21</a>, last updated 1 July 2013, <a href="#">Chapter 23</a>, <a href="#">Chapter 28</a> and <a href="#">Chapter 6</a> last updated 4 April 2013. <a href="https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book">https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book</a></li><li>• Summary of Product Characteristic for MMRVaxPRO<sup>®</sup>, Sanofi Pasteur MSD Ltd. 22 December 2014. <a href="http://www.medicines.org.uk/emc/medicine/20968">http://www.medicines.org.uk/emc/medicine/20968</a></li><li>• Summary of Product Characteristic for Priorix<sup>®</sup>, GlaxoSmithKline. 28 August 2015. <a href="http://www.medicines.org.uk/emc/medicine/2054">http://www.medicines.org.uk/emc/medicine/2054</a></li><li>• NHS public health functions agreement 2016-17, Service Specification No.10. Measles mumps and rubella (MMR) immunisation programme. 5 February 2016. <a href="https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2016/02/serv-spec-10.pdf">https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2016/02/serv-spec-10.pdf</a></li><li>• Revised recommendations for the administration of more than one live vaccine. Public Health England. 24 April 2015 <a href="https://www.gov.uk/government/publications/revised-recommendations-for-administering-more-than-1-live-vaccine">https://www.gov.uk/government/publications/revised-recommendations-for-administering-more-than-1-live-vaccine</a></li><li>• Post exposure prophylaxis for measles: revised guidance. Health Protection Agency. May 2009 <a href="https://www.gov.uk/government/publications/measles-post-exposure-prophylaxis">https://www.gov.uk/government/publications/measles-post-exposure-prophylaxis</a></li></ul> <b>General</b> <ul style="list-style-type: none"><li>• PHE Immunisation Collection <a href="https://www.gov.uk/government/collections/immunisation">https://www.gov.uk/government/collections/immunisation</a></li><li>• British National Formulary (BNF) and British National Formulary for Children (BNF-C) <a href="http://www.bnf.org">www.BNF.org</a> <a href="http://www.evidence.nhs.uk/formulary/bnf/current">http://www.evidence.nhs.uk/formulary/bnf/current</a></li><li>• National Minimum Standards for Immunisation Training (2005) <a href="https://www.gov.uk/government/publications/immunisation-training-national-minimum-standards">https://www.gov.uk/government/publications/immunisation-training-national-minimum-standards</a></li><li>• NICE Medicines Practice Guideline 2 (MPG2): Patient Group Directions. Published August 2013. <a href="https://www.nice.org.uk/guidance/mpg2">https://www.nice.org.uk/guidance/mpg2</a></li><li>• NICE MPG2 Patient group directions: competency framework for health professionals using patient group directions. January 2014. <a href="https://www.nice.org.uk/guidance/mpg2/resources">https://www.nice.org.uk/guidance/mpg2/resources</a></li><li>• Immunisation knowledge and skills competence assessment tool. Royal College of Nursing (RCN) 2015. <a href="https://www.rcn.org.uk/professional-development/publications/pub-005336">https://www.rcn.org.uk/professional-development/publications/pub-005336</a></li><li>• Health Technical Memorandum 07-01: Safe Management of Healthcare Waste. Department of Health 20 March 2013 <a href="https://www.gov.uk/government/publications/guidance-on-the-safe-management-of-healthcare-waste">https://www.gov.uk/government/publications/guidance-on-the-safe-management-of-healthcare-waste</a></li></ul>
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## 7. Individual practitioner authorisation sheet

By signing this patient group direction you are indicating that you agree to its contents and that you will work within it.

Patient group directions do not remove inherent professional obligations or accountability.

It is the responsibility of each professional to practise only within the bounds of their own competence.

### Practitioner

**I confirm that I have read and understood the content of this Patient Group Direction and that I am willing and competent to work to it within my professional code of conduct.**

Signed.....Date.....

Name  
(Print).....

Designation.....

### Authorising manager

Manager to give authorisation on behalf of **INSERT NAME OF ORGANISATION** for the named health care professional who has signed the PGD.

Signed..... Date.....

Name (Print).....

Designation.....

### Note to authorising manager

By signing above you are confirming that you have assessed the staff member as competent to work under this PGD and that they have the organisational approval to do so.

You must give this signed PGD to each authorised practitioner as it shows their authorisation to use the PGD.