Public Health England

NHS

PHE publications gateway number: GW-1011

Measles, mumps and rubella vaccine Patient Group Direction (PGD)

This PGD is for the administration of measles, mumps and rubella (MMR) vaccine to individuals from 1 year 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 guidelines on post-exposure prophylaxis for measles.

This PGD is for the administration of MMR vaccine by registered healthcare practitioners identified in Section 3, subject to any limitations to authorisation detailed in Section 2.

Reference no:	MMR Vaccine PGD
Version no:	v03.00
Valid from:	1 March 2020
Review date:	1 August 2021
Expiry date:	28 February 2022

Public Health England has developed this PGD to facilitate publicly-funded immunisation in line with national recommendations.

Those using this PGD must ensure that it is organisationally authorised and signed in Section 2 by an appropriate authorising person, relating to the class of person by whom the product is to be supplied, in accordance with Human Medicines Regulations 2012 (HMR2012)[1]. **The PGD is not legal or valid without signed authorisation in accordance with HMR2012 Schedule 16 Part 2.**

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 within the designated editable fields provided.

Operation of this PGD is the responsibility of commissioners and service providers. The final authorised copy of this PGD should be kept by the authorising organisation completing Section 2 for 8 years after the PGD expires if the PGD relates to adults only and for 25 years after the PGD expires if the PGD relates to children only, or adults and children. Provider organisations adopting authorised versions of this PGD should also retain copies for the periods specified above.

Individual practitioners 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-patient-group-direction-pgd

Any concerns regarding the content of this PGD should be addressed to: Immunisation@phe.gov.uk

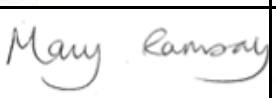
[1] This includes any relevant amendments to legislation (such as 2013 No.235, 2015 No.178 and 2015 No.323).

Change history

Version number	Change details	Date
V01.00	New PHE PGD template	3 March 2016
V02.00	PHE MMR PGD amended to: • include additional healthcare practitioners (pharmacists, paramedics, physiotherapists) in Section 3 • amend age from 12 months to 1 year • move neurological conditions from exclusions to cautions to align with “The Green Book” Chapter 6 guidance • revise cautions • clarify dose and frequency of administration section • add paragraph on patient consent to the off-label section • reference the protocol for ordering, storage and handling of vaccines • refer to vaccine incident guidelines • include rewording, layout and formatting changes for clarity and consistency with other PHE PGD templates	26 January 2018
V03.00	PHE MMR PGD amended to: • remove live vaccine intervals table and refer to Green Book Chapter 11 • revise recommendations relating to MMR second dose before 18 months of age • add sentence to neurological conditions paragraph in cautions section • include minor rewording, layout and formatting changes for clarity and consistency with other PHE PGDs	18 December 2019

1. PGD development

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

Developed by:	Name	Signature	Date
Pharmacist (Lead Author)	Elizabeth Graham Lead Pharmacist, Immunisation and Countermeasures, PHE		20/12/2019
Doctor	Mary Ramsay Consultant Epidemiologist and Head of Immunisation and Countermeasures, PHE		14/01/2020
Registered Nurse (Chair of Expert Panel)	David Green Nurse Consultant, Immunisation and Countermeasures, PHE		20/12/2019

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

Expert Panel

Name	Designation
Ed Gardner	Advanced Paramedic Practitioner/Emergency Care Practitioner, Medicines Manager, Proactive Care Lead
Jacqueline Lamberty	Lead Pharmacist Medicines Management Services, Public Health England
Michelle Jones	Senior Medicines Optimisation Pharmacist, NHS Bristol North Somerset & South Gloucestershire CCG
Vanessa MacGregor	Consultant in Communicable Disease Control, Public Health England, East Midlands Health Protection Team
Alison Mackenzie	Consultant in Public Health Medicine, Screening and Immunisation Lead, Public Health England (South West) / NHS England and NHS Improvement South (South West)
Gill Marsh	Senior Screening and Immunisation Manager, Public Health England / NHS England and NHS Improvement (North West)
Lesley McFarlane	Screening and Immunisation Co-ordinator, Public Health England / NHS England and NHS Improvement Leicestershire, Lincolnshire and Northamptonshire
Vanessa Saliba	Consultant Epidemiologist, Public Health England
Tushar Shah	Pharmacy Advisor, NHS England and NHS Improvement London Region
Sharon Webb	Programme Manager / Registered Midwife, NHS Infectious Diseases in Pregnancy Screening Programme, Public Health England

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 & NHS Improvement (South East) authorises this PGD for use by the services or providers listed below:

Authorised for use by the following organisations and/or services
All NHS England commissioned immunisation services within the NHS England and NHS Improvement South East Region.
Limitations to authorisation
This patient group direction (PGD) must only be used by the registered healthcare practitioners identified in Section 3 who have been named by their organisation to practice under it. The most recent in-date final version authorised by NHS England and NHS Improvement (South East) must be used. **This PGD includes vaccination of individuals across the national immunisation programme. Users of this PGD should note that where they are commissioned to immunise certain groups this PGD does not constitute permission to offer immunisation beyond the groups they are commissioned to immunise.**

Organisational approval (legal requirement)			
Role	**Name**	**Sign**	**Date**
Medical Director System Improvement and Professional Standards NHS England and NHS Improvement South East Region	**Dr Shahed Ahmad**		**10/2/2020**

Additional signatories according to locally agreed policy			
Role	**Name**	**Sign**	**Date**

Local enquiries regarding the use of this PGD may be directed to england.sescreeningandimms@nhs.net

Section 7 provides a practitioner authorisation sheet. Individual practitioners must be authorised by name to work to this PGD. Alternative practitioner authorisation sheets may be

used where appropriate in accordance with local policy but this should be an individual agreement or a multiple practitioner authorisation sheet as included at the end of this PGD.

3. Characteristics of staff

Qualifications and professional registration	Registered professional with one of the following bodies: • nurses and midwives currently registered with the Nursing and Midwifery Council (NMC) • pharmacists currently registered with the General Pharmaceutical Council (GPhC) (Note: This PGD is not relevant to privately provided community pharmacy services) • paramedics and physiotherapists currently registered with Health and Care Professions Council (HCPC) The practitioners above must also fulfil the Additional requirements detailed below. Check Section 2 Limitations to authorisation to confirm whether all practitioners listed above have organisational authorisation to work under this PGD.
Additional requirements	Additionally practitioners: • must be authorised by name as an approved practitioner under the current terms of this PGD before working to it • must have undertaken appropriate training for working under PGDs for supply/administration of medicines • must be competent in the use of PGDs (see NICE Competency framework for health professionals using PGDs) • must be familiar with the vaccine product and alert to changes in the Summary of Product Characteristics (SPC), Immunisation Against Infectious Disease (the 'Green Book'), and national and local immunisation programmes • must have undertaken training appropriate to this PGD as required by local policy and in line with the National Minimum Standards and Core Curriculum for Immunisation Training • must be competent to undertake immunisation and to discuss issues related to immunisation • must be competent in the handling and storage of vaccines, and management of the cold chain • must be competent in the recognition and management of anaphylaxis • must have access to the PGD and associated online resources • should fulfil any additional requirements defined by local policy **The practitioner must be authorised by name, under the current version of this PGD before working according to it.**
Continued training requirements	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). Practitioners should be constantly alert to any subsequent recommendations from Public Health England and/or NHS England and other sources of medicines information. 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.

4. Clinical condition or situation to which this PGD applies

Clinical condition or situation to which this PGD applies	Indicated for the active immunisation of individuals from 1 year 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 Guidelines on post-exposure prophylaxis for measles and recommendations given in Chapter 21, Chapter 23 and Chapter 28 of Immunisation Against Infectious Disease: the 'Green Book'.
Criteria for inclusion	Individuals who: • are aged 1 year (on or after their first birthday) or older and are incompletely or un-immunised with MMR vaccine or of unknown vaccination status* • are between 6 months and 1 year of age and early protection is considered necessary, such as due to travel or outbreak • are aged 6 months and over and vaccination is indicated for measles post-exposure prophylaxis in accordance with PHE recommendations *See Special considerations / additional information section for further detail on patient groups at particular risk from measles, mumps or rubella infection and opportunities to check immunisation status and vaccinate as appropriate.
Criteria for exclusion[2]	Individuals for whom no valid consent has been received. Individuals who: • 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) • are known to be pregnant • have a primary or acquired immunodeficiency state (see the 'Green Book' Chapter 6 for more detail) • are on current or recent high dose immunosuppressive or biological therapy (see the 'Green Book' Chapter 6 for more detail) • have received varicella, zoster or yellow fever vaccine in the preceding 4 weeks, unless protection against measles is required rapidly (see Drug Interactions) • have received blood products, such as immunoglobulins, in the preceding 3 months, unless protection against measles is required rapidly (see Drug Interactions) • are awaiting reading of a tuberculin (Mantoux) skin test, unless protection against measles is required rapidly (see Drug Interactions) • are suffering from acute severe febrile illness (the presence of a minor infection is not a contraindication for immunisation)

[2] Exclusion under this PGD does not necessarily mean the medication is contraindicated, but it would be outside its remit and another form of authorisation will be required

Cautions including any relevant action to be taken	Individuals who are immunosuppressed or have HIV infection who are not contraindicated this live vaccine (see the 'Green Book' Chapter 6 and seek specialist advice as appropriate), may not make a full antibody response and revaccination on cessation of treatment/recovery may be required. This should be discussed with the appropriate/relevant specialist. If idiopathic thrombocytopaenic 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. The presence of a neurological condition is not a contraindication to immunisation but if there is evidence of current neurological deterioration, deferral of vaccination may be considered, to avoid incorrect attribution of any change in the underlying condition. The risk of such deferral should be balanced against the risk of the preventable infection, and vaccination should be promptly given once the diagnosis and/or the expected course of the condition become clear. If there is a risk of exposure, however, it may be more appropriate to counsel the patient about the benefits of protection rather than deferring. Children with a personal or close family history of seizures should be given MMR vaccine. Syncope (fainting) can occur following, or even before, any vaccination especially in adolescents as a psychogenic response to the needle injection. This can be accompanied by several neurological signs such as transient visual disturbance, paraesthesia and tonic-clonic limb movements during recovery. It is important that procedures are in place to avoid injury from faints.
Action to be taken if the patient is excluded Continued over page	Individuals who have had a confirmed anaphylactic reaction to a previous dose of MMR vaccine or any components of the vaccine should be referred to a clinician for specialist advice and appropriate management. 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 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. Individuals who have a primary or acquired immunodeficiency state or who are currently, or were recently, on high dose immunosuppressive or biological therapy (see Chapter 6): 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. Individuals who have been immunised against varicella, zoster or yellow fever within the last 4 weeks, or received blood products in the preceding 3 months, and do not require rapid protection against MMR, defer immunisation until appropriate interval (see Drug Interactions section).

Action to be taken if the patient is excluded continued	Individuals who are awaiting reading of a tuberculin (Mantoux) test, should delay MMR vaccination until the skin test has been read unless protection against measles is required urgently. Individuals suffering acute severe febrile illness should postpone immunisation until they have recovered; immunisers should advise when the individual can be vaccinated and ensure another appointment is arranged. Seek appropriate advice from the local Screening and Immunisation Team, local Health Protection Team or the individual's clinician as required. The risk to the individual of not being immunised must be taken into account. Document the reason for exclusion and any action taken in the individual's clinical records. Inform or refer to the GP or a prescriber as appropriate.
Action to be taken if the patient or carer declines treatment	Informed consent, from the individual or a person legally able to act on the person's behalf, must be obtained for each administration. Advise the individual/parent/carer about the protective effects of the vaccine, the risks of infection and potential complications. Document advice given and the decision reached. Inform or refer to the GP as appropriate.
Arrangements for referral for medical advice	As per local policy

5. Description of treatment

Name, strength & formulation of drug	Measles, mumps and rubella vaccine (live): • Priorix®, powder and solvent for solution for injection in a pre-filled syringe • MMRVaxPRO®, powder and solvent for suspension for injection in a pre-filled syringe
Legal category	Prescription only medicine (POM)
Black triangle▼	No
Off-label use	Administration to infants between 6 months and 9 months of age is off-label in accordance with PHE guidance for measles post exposure prophylaxis and recommendations given in Chapter 21, Chapter 23 and Chapter 28 of Immunisation Against Infectious Disease: the 'Green Book'. Vaccine should be stored according to the conditions detailed in the Storage section below. However, in the event of an inadvertent or unavoidable deviation of these conditions refer to PHE Vaccine Incident Guidance. Where vaccine is assessed in accordance with these guidelines as appropriate for continued use this would constitute off-label administration under this PGD. Where a vaccine is recommended off-label consider, as part of the consent process, informing the individual/parent/carer that the vaccine is being offered in accordance with national guidance but that this is outside the product licence.
Route / method of administration	The vaccine must be reconstituted in accordance with the manufacturer's instructions prior to administration. Administer by intramuscular injection. The deltoid region of the upper arm may be used in individuals over one year of age. The anterolateral aspect of the thigh is the preferred site for infants under one year old. 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. For individuals with a bleeding disorder, vaccines normally given by an intramuscular route should be given in accordance with the recommendations in the 'Green Book' Chapter 4. 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. The vaccine's SPC provides further guidance on administration and is available from the electronic Medicines Compendium website: www.medicines.org.uk

Dose and frequency of administration	Single 0.5ml dose per administration. **Routine childhood immunisation schedule** A total of two doses of 0.5ml provided at the recommended interval (see below): • the first dose should routinely be given at 1 year of age (on or after the first birthday) • the second dose is routinely scheduled before school entry at three years four months of age Note: The second dose is normally given before school entry but can be given routinely from eighteen months (see Early vaccination paragraphs below). **Incomplete immunisation history** Individuals from 1 year of age who have not received an MMR vaccine should receive a dose and be brought up to date at the earliest opportunity. An individual who has already received one dose of MMR should receive a second dose according to the routine schedule or at least 1 month after the first dose (when aged 18 months or over) to ensure that they are protected. See the vaccination of individuals with uncertain or incomplete immunisation status flow chart. **Early vaccination due to travel, outbreak or contact with a probable or confirmed case of measles** The MMR vaccine can be given from 6 months of age when early protection is required. 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 (at 1 year of age and a pre-school dose at three years four months). 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 given the second dose at less than 15 months of age, then another routine dose (a third dose) should be given after 18 months of age in order to ensure full protection.
Duration of treatment	Two doses of 0.5ml at the recommended interval (see Dose and Frequency of Administration above). Doses that are administered earlier than the routine schedule, given within 4 weeks of previous yellow fever, varicella or zoster vaccine, or within 3 months of receiving blood products (see Drug Interactions section), may need to be repeated.
Quantity to be supplied / administered	Single 0.5ml dose per administration.

Supplies	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. National stock may also be used for catch-up vaccination of individuals of any age. Protocols for the ordering, storage and handling of vaccines should be followed to prevent vaccine wastage (see the 'Green Book' Chapter 3).
Storage	Store between +2°C to +8°C. Store in original packaging in order to protect from light. Do not freeze. After reconstitution, the vaccine should be administered promptly or stored between +2°C to +8°C and used within 8 hours of reconstitution. If not used after this time it should be discarded. In the event of an inadvertent or unavoidable deviation of these conditions, vaccine that has been stored outside the conditions stated above should be quarantined and risk assessed for suitability of continued off-label use or appropriate disposal. Refer to PHE Vaccine Incident Guidance.
Disposal	Equipment used for immunisation, including used vials, ampoules, or discharged vaccines in a syringe or applicator, should be disposed of safely in a UN-approved puncture-resistant 'sharps' box, according to local authority regulations and guidance in the technical memorandum 07-01: Safe management of healthcare waste (Department of Health, 2013).
Drug interactions	Immunological response may be diminished in those receiving immunosuppressive treatment. May be given at the same time as inactivated vaccines or at any interval before or after. MMR may attenuate the response to other live vaccines see Table 11.3 in Chapter 11 of the Green Book for the recommended time intervals when giving more than one live attenuated vaccine. 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. 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. 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 vaccine should still be given. To confer longer-term protection, MMR should be repeated after three months.

Continued over page

Drug interactions (continued)	A detailed list of drug interactions is available in the SPC, which is available from the electronic Medicines Compendium website: www.medicines.org.uk
Identification & management of adverse reactions	The most common adverse reactions are fever and injection site reactions including pain, swelling and erythema. 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. 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. Adverse reactions are considerably less common after a second dose of MMR vaccine than after the first dose. Hypersensitivity reactions and anaphylaxis can occur but are very rare. **Rare and more serious events** 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. 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. 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). Further details on adverse reactions following MMR vaccine can be found in the 'Green Book' Chapter 21, Chapter 23 and Chapter 28. A detailed list of adverse reactions is available in the vaccine's SPC, which is available from the electronic Medicines Compendium website: www.medicines.org.uk
Reporting procedure of adverse reactions	Healthcare professionals and individuals/parents/carers are encouraged to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme on: http://yellowcard.mhra.gov.uk Any adverse reaction to a vaccine should be documented in the individual's record and the individual's GP should be informed.
Written information to be given to patient or carer	Offer marketing authorisation holder's patient information leaflet (PIL) provided with the vaccine. Immunisation promotional material may be provided as appropriate: • Immunisations at 1 year of age • Pre-school immunisations: guide to vaccinations (2 to 5 years) Available from: www.gov.uk/government/collections/immunisation

Patient advice / follow up treatment	Inform the individual/parent/carer of possible side effects and their management. Advise about likely timing of any fever and management of a fever. Advise where relevant that pregnancy should be avoided for 1 month post vaccination. The individual/parent/carer should be advised to seek medical advice in the event of an adverse reaction. When administration is postponed advise the individual/parent/carer when to return for vaccination.
Special considerations / additional information Continued over page	Ensure there is immediate access to adrenaline (epinephrine) 1 in 1000 injection and access to a telephone at the time of vaccination. 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. MMRVaxPRO® (Sanofi Pasteur MSD) contains porcine gelatine. Priorix® (GSK) does NOT contain porcine gelatine and can be offered as an alternative to MMRVaxPRO®. Health professionals should be aware to order Priorix® when running clinics for relevant communities (see Vaccines and porcine gelatine leaflet). 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. 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. MMR vaccine can be provided to children and adults of any age over 6 months using this PGD. If a dose of MMR is given before the first birthday, either because of travel to an endemic country, or because of a local outbreak, then this dose should be ignored, and two further doses given at the recommended times. Maternal antibodies may reduce the response to the first dose of vaccination up to the age of 18 months. To provide additional protection to those who fail to respond to the first dose, therefore, the second dose should not routinely be given below 18 months of age. 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' Chapter 21, Chapter 23 and Chapter 28. 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 two doses of MMR should be offered appropriate MMR immunisation. Pre-conceptual care, antenatal and post-natal checks provide an opportunity to assess MMR status. Individuals who have not received two doses of MMR at an appropriate interval should be

Special considerations / additional information (continued)	offered pre- or post-natal MMR immunisation. Pregnancy should be avoided for at least 1 month following vaccination. Children and adults coming from abroad may not have been immunised against measles, mumps and rubella. Unless there is a reliable history of appropriate immunisation, individuals should be assumed to be unimmunised. **Post Exposure** 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. 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. 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. Immunoglobulin may be indicated for contacts of measles who are infants, immunosuppressed or pregnant. Provision of immunoglobulin is not covered by this PGD.
Records Continued over page	Record: • that valid informed consent was given • name of individual, address, date of birth and GP with whom the individual is registered • name of immuniser • name and brand of vaccine • date of administration • dose, form and route of administration of vaccine • quantity administered • batch number and expiry date • anatomical site of vaccination • advice given, including advice given if excluded or declines immunisation • details of any adverse drug reactions and actions taken • supplied via PGD Records should be signed and dated (or a password controlled immuniser's record on e-records). All records should be clear, legible and contemporaneous. 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. The local Child Health Information Systems team (Child Health Records Department) must be notified using the appropriate

Records (continued)	documentation/pathway as required by any local or contractual arrangement. A record of all individuals receiving treatment under this PGD should also be kept for audit purposes in accordance with local policy.

6. Key references

Key references	**MMR vaccine** • Immunisation Against Infectious Disease: The Green Book Chapter 21, updated December 2019; Chapter 23 and Chapter 28, last updated 4 April 2013; Chapter 6 updated 26 October 2017; and Chapter 11 updated December 2019. https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book • Summary of Product Characteristic for MMRVaxPRO®, MSD Ltd. 16 April 2019. http://www.medicines.org.uk/emc/medicine/20968 • Summary of Product Characteristic for Priorix®, GlaxoSmithKline. 24 January 2019. http://www.medicines.org.uk/emc/medicine/2054 • Guidelines on post-exposure prophylaxis for measles. Public Health England. June 2019. https://www.gov.uk/government/publications/measles-post-exposure-prophylaxis **General** • Health Technical Memorandum 07-01: Safe Management of Healthcare Waste. Department of Health 20 March 2013. https://www.gov.uk/government/publications/guidance-on-the-safe-management-of-healthcare-waste • National Minimum Standards and Core Curriculum for Immunisation Training. Published February 2018. https://www.gov.uk/government/publications/national-minimum-standards-and-core-curriculum-for-immunisation-training-for-registered-healthcare-practitioners • NICE Medicines Practice Guideline 2 (MPG2): Patient Group Directions. Published March 2017. https://www.nice.org.uk/guidance/mpg2 • NICE MPG2 Patient group directions: competency framework for health professionals using patient group directions. Updated March 2017. https://www.nice.org.uk/guidance/mpg2/resources • PHE Immunisation Collection https://www.gov.uk/government/collections/immunisation • PHE Vaccine Incident Guidance https://www.gov.uk/government/publications/vaccine-incident-guidance-responding-to-vaccine-errors

7. Practitioner authorisation sheet

MMR Vaccine PGD v03.00 Valid from: 01/03/2020 Expiry: 28/02/2022

Before signing this PGD, check that the document has had the necessary authorisations in section two. Without these, this PGD is not lawfully valid.

Practitioner

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

PGDs 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 and professional code of conduct.

I confirm that I have read and understood the content of this PGD and that I am willing and competent to work to it within my professional code of conduct.			
Name	Designation	Signature	Date

Authorising manager

I confirm that the practitioners named above have declared themselves suitably trained and competent to work under this PGD. I give authorisation on behalf of **insert name of organisation** for the above named health care professionals who have signed the PGD to work under it.			
Name	Designation	Signature	Date

Note to authorising manager

Score through unused rows in the list of practitioners to prevent practitioner additions post managerial authorisation.

This authorisation sheet should be retained to serve as a record of those practitioners authorised to work under this PGD.