

This Patient Group Direction (PGD) must only be used by registered healthcare professionals who have been named and authorised by their organisation to practice under it. The most recent and in date final signed version of the PGD should be used.

PATIENT GROUP DIRECTION (PGD)

Supply of flucloxacillin capsules/oral solution/oral suspension for the treatment of infected insect bite(s) and sting(s) under the NHS England commissioned Pharmacy First service

Version Number 1.0

Change History		
Version and Date		Change details
Version 1.0 January 2024	New template	



ORGANISATIONAL AUTHORISATIONS

Name	Job title and organisation	Signature	Date
Senior doctor Professor Sir Stephen Powis	National Medical Director, NHS England	Agt Bri	11.12.23
Senior pharmacist David Webb	Chief Pharmaceutical Officer, NHS England	AMA	08.12.23
Specialist in microbiology Professor Mark Wilcox	National Clinical Director for AMR & IPC, NHS England	Norte Line.	11.12.23
Person signing on behalf of <u>authorising</u> <u>body</u> David Webb	Chief Pharmaceutical Officer, NHS England	(ANA)	08.12.23



PGD DEVELOPMENT GROUP

Date PGD comes into effect:	31/01/2024
Review date	30/07/2026
Expiry date:	30/01/2027

This PGD has been peer reviewed by the skin antimicrobial national PGD Short Life Working Group in accordance with their Terms of Reference. It has been reviewed by The Advisory Committee on Antimicrobial Prescribing, Resistance and Healthcare Associated Infection (APRHAI) to the Department of Health and Social Care (England) in November 2023.

Name	Designation
Dr Diane Ashiru-	Lead Pharmacist, HCAI, Fungal, AMR, AMU & Sepsis Division, UK
Oredope	Health Security Agency
Dr Imran Jawaid	GP and RCGP AMR representative
Dr Jeeves Wijesuriya	GP and Clinical Advisor to NHS England Primary Care Team and
	Vaccination and Screening Team
Dr Naomi Fleming	NHS England Regional Antimicrobial Stewardship lead for the East
	of England region
Jackie Lamberty	Medicines Governance Consultant Lead Pharmacist, UK Health
	Security Agency
Jo Jenkins	Lead Pharmacist Patient Group Directions and Medicines
	Mechanisms, Medicines Use and Safety Division, Specialist
	Pharmacy Service
Liz Cross	Advanced Nurse Practitioner QN
Dr Martin Williams	Consultant in Microbiology and Infectious Diseases
Dr Matthew Scorer	Consultant Dermatologist
Dr Michelle Toleman	Consultant Microbiologist
Temitope Odetunde	Head of Medicines Management
Kieran Reynolds (SLWG	Specialist Pharmacist – Medicines Governance, Medicines Use
co-ordinator)	and Safety Division, Specialist Pharmacy Service
Nigel Gooding	Consultant Paediatric Pharmacist. Neonatal and Paediatric
	Pharmacist Group (NPPG) representative.
Dr Stephanie Gallard	GP (Dermatology Special Interest)
Rob Hebdon	National Pharmacy Integration Lead
	Primary Care, Community Services and Strategy Directorate, NHS
	England



Characteristics of staff

Qualifications and professional registration	Registered healthcare professional listed in the legislation as able to practice under Patient Group Directions.
Initial training	 The registered healthcare professional authorised to operate under this PGD must have undertaken appropriate education and training and be competent to undertake clinical assessment of patients ensuring safe provision of the medicines listed in accordance with the specification. To deliver this service, the registered healthcare professional should have evidence of competence in the clinical skills and knowledge covered in the Centre for Pharmacy Postgraduate Education (CPPE) Pharmacy First Service self-assessment framework. Before commencement of the service, the pharmacy contractor must ensure that pharmacists and pharmacy staff providing the service are competent to do so and be familiar with the clinical pathways, clinical protocol and PGDs. This may involve completion of training.
Competency assessment	 Individuals operating under this PGD must be assessed as competent or complete a self-declaration of competence to operate under this PGD (see an example authorisation record sheet in Appendix A). Individuals operating under this PGD are advised to review their competency using the <u>NICE Competency Framework for health</u> professionals using patient group directions.
Ongoing training and competency	 Individuals operating under this PGD are personally responsible for ensuring they remain up to date with the use of all medicines and guidance included in the PGD - if any training needs are identified these should be discussed with the senior individual responsible for authorising individuals to act under the PGD and further training provided as required.
	any medication rests with the individual registered health professional who D and any associated organisational policies.



Clinical condition or situation to which this PGD applies

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Clinical condition or situation to which this PGD applies	Infected insect bite(s) and sting(s) in children aged 1 year and over and adults.
Criteria for inclusion	 Informed consent Individuals aged 1 year and over Diagnosis of infected insect bite or sting using the appropriate diagnostic (NICE CKS) guidance. Clear evidence of infection that is present or worsening at least 48 hours after the initial bite(s) or sting(s) with 3 or more of the following symptoms: Redness of the skin (erythema may be more difficult to distinguish on darker skin tones) Pain or tenderness to the area Swelling of the skin Skin surrounding the bite(s) or sting(s) feels hot to touch AND any of the following: Redness or swelling of the skin surrounding the bite(s) or sting(s) is spreading Evidence of pustular discharge at site of bite(s) or sting(s)
Criteria for exclusion	 Consent refused and documented in the individual's medical notes Individuals under 1 year of age Pregnancy or suspected pregnancy in individuals under 16 years of age Severely immunosuppressed individuals as defined in <u>Chapter 28a</u> <u>Green book</u>): <i>Individuals with primary or acquired immunodeficiency states due to</i> <i>conditions including:</i> acute and chronic leukaemias, and clinically aggressive lymphomas (including Hodgkin's lymphoma) who are less than 12 months since achieving cure individuals under follow up for a chronic lymphoproliferative
Version: 1.0	 disorders including haematological malignancies such as indolent lymphoma, chronic lymphoid leukaemia, myeloma, Waldenstrom's macroglobulinemia and other plasma cell dyscrasias (N.B: this list not exhaustive) immunosuppression due to HIV/AIDS with a current CD4 count of below 200 cells/µl. primary or acquired cellular and combined immune deficiencies – those with lymphopaenia (<1,000 lymphocytes/ul) or with a functional lymphocyte disorder those who have received an allogeneic (cells from a donor) or an autologous (using their own cells) stem cell transplant in the previous 24 months those who have received a stem cell transplant more than 24 months ago but have ongoing immunosuppression or graft versus host disease (GVHD) Individuals on immunosuppressive or immunomodulating therapy including: those who are receiving or have received in the past 6 months immunosuppressive chemotherapy or radiotherapy for any indication



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	 those who are receiving or have received in the previous 6 months immunosuppressive therapy for a solid organ transplant those who are receiving or have received in the previous 3 months targeted therapy for autoimmune disease, such as JAK inhibitors or biologic immune modulators including B-cell targeted therapies (including fluximab but for which a 6 month period should be considered immunosuppressive), monoclonal tumor necrosis factor inhibitors (TNFI), T-cell co-stimulation modulators, soluble TNF receptors, interleukin (IL)-6 receptor inhibitors, IL-17 inhibitors, IL 12/23 inhibitors, IL 23 inhibitors (N.B: this list is not exhaustive) Individuals with chronic immune mediated inflammatory disease who are receiving or have received immunosuppressive therapy moderate to high dose corticosteroids (equivalent ≥20mg prednisolone per day) for more than 10 days in the previous 3 months long term moderate dose corticosteroids (equivalent to ≥10mg prednisolone per day for more than 4 weeks) in the previous 3 months any non-biological oral immune modulating drugs e.g. methotrexate >20mg preveck (oral and subcutaneous), azathioprine >3.0mg/kg/day; 6-mercaptopurine >1.5mg/kg/day, mycophenolate >1g/day) in the previous 3 months certain combination therapies at individual doses lower than stated above, including those on 27.5mg prednisolone per day in combination with other immunosuppressants (other than hydroxychloroquine or sulfasalazine) and those receiving methotrexate (any dose) with leflunomide in the previous 3 months Individuals who have received a short course of high dose steroids (equivalent >40mg prednisolone per day for more than a week) for any reason in the previous month. Known hypersensitivity to flucloxacillin, any penicillin or any of the components within the formulation of flucloxacillin – see Summary of Product Characterisitics. Acceptable sources of allergy information include indi
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•	Previous systemic allergic reaction to the same type of bite or sting
•	Known comorbidity which may complicate or delay resolution of infection (for example peripheral arterial disease, chronic venous insufficiency, lymphoedema or morbid obesity).
	Severe pain out of proportion to the wound (may indicate presence
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Specific information for	 total lactase deficiency, glucose-galactose malabsorption, sucrase-isomaltase deficiency, fructose-1,6-bisphosphatase deficiency (also known as hereditary fructose intolerance): check the individual list of excipients available in the <u>SPC</u> before supplying. Aspartame: Individuals with <u>phenylketonuria</u> (PKU) must not use medicines containing aspartame. Check the individual list of excipients available in the <u>SPC</u> before supplying.
suspected infection to be provided	 Provide information on insect bites and stings: NHS Website - <u>Insect bites and stings</u> And, where relevant, provide the following information: UKHSA - <u>Tick Awareness</u> The Anaphylaxis Campaign - <u>Insect sting allergy – the facts.</u>
Action to be taken if the individual is excluded	 Record reasons for exclusion in the appropriate clinical record Individuals where treatment is not indicated: Advise individual/carer/parent/guardian of alternative non antibiotic treatment if antibiotic not indicated and provide <u>TARGET self-care</u> leaflet and safety netting advice. Some individuals may wish to consider oral antihistamines to help relieve itching, even though there is uncertainty about their effectiveness. Ask the individual to draw a line around the border of erythema (or take clear photos of the area) and to return to Community Pharmacy for pharmacist reassesment if: Symptoms worsen at any time OR Do not improve after 3 days of <u>self-care</u>. Refer urgently to a prescriber for further assessment if: Individual is systemically unwell, but not showing signs or symptoms of <u>sepsis</u> Individual is systemically well but with a comorbidity (for example peripheral arterial disease, chronic venous insufficiency, or morbid obesity) which may complicate or delay resolution of infection Severe pain out of proportion to the wound Individual has significant collection of fluid or pus at site of infection Animal bite or scratch Human bite Evidence of erythema migrans (bullseye rash, which may appear as a bruise on brown or black skin) Bite or sting that occurred while travelling outside of the UK with concern of insect borne disease e.g. malaria Bite or sting caused by an unusual or exotic insect Individuals where treatment under this PGD is not indicated/permitted but dermatological symptoms are present and require further assessment
	Refer urgently to A&E for further assessment if:



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	 Any individual suspected of having a <u>systemic reaction</u> to an insect bite or sting i.e. angio-oedema or anaphylaxis Previous <u>systemic allergic reaction</u> (e.g. angio-oedema or anaphylaxis) to the same type of bite or sting Individual is severely immunosuppressed and has signs or symptoms of infection Has been stung on the mouth, throat or tongue and is at risk of airway obstruction Has been stung around the eyes and is at risk of compromised vision
Action to be taken if the individual/carer/parent/ guardian declines treatment	 Document advice given Provide safety netting advice and advise individual/carer/parent/guardian of alternative treatment available using <u>TARGET self-care leaflet</u>. Provide information on insect bites and stings: NHS Website – <u>Insect bites and stings</u> And, where relevant, provide the following information: UKHSA — <u>Tick Awareness</u> The Anaphylaxis Campaign — <u>Insect sting allergy – the facts.</u>
Arrangements for referral for medical advice	Refer to a prescriber if antibiotic appropriate but falls outside of this PGD.

Description of treatment

Name, strength & formulation of drug	Flucloxacillin 250mg capsules Flucloxacillin 500mg capsules Flucloxacillin 125mg/5mL oral solution (or oral suspension) x 100mL Flucloxacillin 125mg/5mL sugar free oral solution (or oral suspension) x 100mL Flucloxacillin 250mg/5mL oral solution (or oral suspension) x 100mL Flucloxacillin 250mg/5mL sugar free oral solution (or oral suspension) x 100mL	
Legal category	POM	
Route / method of administration	Orally 1 hour before or 2 hours after food. Capsules should be swallowed whole.	
	Note: Flucloxacillin sugar free oral solution (or oral suspension) may have a poor taste potentially leading to reduced compliance. After discussion with individual/carer/parent/guardian consider sugar- containing preparation.	
	 Children should be encouraged (where possible) to swallow solid oral dose forms (i.e. tablets or capsules): <u>Medicines for Children</u>: has useful guides on how to give medicines, including <u>giving tablets</u> and <u>giving capsules</u>. 	



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	<u>KidzMed</u> is an eLfH resource for healthcare professionals teaching children to swallow pills.
Off-label use	Temperature variations Medicines should be stored according to the conditions detailed in the <u>Storage</u> section below. However, in the event of an inadvertent or unavoidable deviation of these conditions a pharmacist must ensure the medicine remains pharmaceutically stable and appropriate for use if it is to be issued.
	Where medicines have been assessed by a pharmacist in accordance with national or specific product recommendations/manufacturer advice as appropriate for continued use this would constitute off-label administration under this PGD.
	The responsibility for the decision to release the affected medicines for use lies with the pharmacist.
	Manipulating solid dosage forms In the event of an individual being unable to swallow solid oral dosage formulations, and alternate liquid formulations not being readily available provide advice on how to give doses by opening capsules. Use in this way may be outside the product licence and is thus off-label.
	Opening and dispersing
	Flucloxacillin capsules can be opened and the contents tipped out and mixed with liquid or soft food. However, this should not be performed by anyone with, or in the vicinity of someone with a penicillin allergy.
	Masking the taste
	The capsule contents will taste bitter so it can be helpful to use a strongly flavoured drink (e.g. blackcurrant cordial) or food (e.g. jam, apple sauce, yoghurt) that the individual likes:
	 Use a small amount of food or drink (e.g. a teaspoonful) so you can be sure the individual eats it all and swallows the whole dose It might be helpful to use an oral syringe for liquids After mixing the powder with food or drink, give it straight away
	Although flucloxacillin is generally given on an empty stomach, evidence suggests that there is no difference in absorption when flucloxacillin is given with or without food.
	Where a drug is recommended off-label consider, as part of the consent process, informing the individual/carer/parent/guardian that the drug is being offered in accordance with national guidance but that this is outside the product licence.
Dose and frequency of administration	Children aged 1 year and over and under 2 years of age: 125mg four times a day
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	Children 2–9 years:				
	250mg four times a day				
	Children 10–17 years and adults:				
	500mg four times a day				
Duration of treatment	5 days				
	Treatment should be started immediately and 5 days of treatment				
	completed.				
Quantity to be supplied	In line with the Pharmacy First service specification the best value product to meet the clinical need should be supplied from those listed within this PGD.				
	Children aged 1 and over and under 2 years of age: Appropriately labelled pack of 1 x 100mL x 250mg/5mL oral solution (or oral suspension) OR appropriately labelled pack of 1 x 100mL x 125mg/5mL oral solution (or oral suspension)				
	Children 2–9 years Appropriately labelled pack of 20 x 250mg capsules OR appropriately labelled pack of 1 x 100mL x 250mg/5mL oral solution (or oral suspension) OR appropriately labelled pack of 2 x 100mL x 125mg/5mL oral solution (or oral suspension)				
	Children 10–17 years and adults Appropriately labelled pack of 20 x 500mg capsules OR appropriately labelled pack of 40 x 250mg capsules OR appropriately labelled pack of 2 x 100mL x 250mg/5mL oral solution (or oral suspension) OR appropriately labelled pack of 4 x 100mL x 125mg/5mL oral solution (or oral suspension)				
Storage	Stock must be securely stored according to organisation medicines policy and in conditions in line with SPC, which is available from the electronic Medicines Compendium website: <u>www.medicines.org.uk</u>				
Drug interactions	Where it is known an individual is concurrently taking one of the following medicines, flucloxacillin must not be supplied under this PGD and the individual referred to a prescriber:				
	 Methotrexate Probenecid Typhoid vaccine (oral): see <u>Criteria for exclusion</u> Paracetamol: recent or current use in individuals at risk of HAGMA with other risk factors (e.g. malnutrition, sepsis, renal impairment). <i>Paracetamol can be taken concomitantly with flucloxacillin in patients without these risk factors.</i> 				
	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	A detailed list of adverse reactions is available in the SPC, which is available from the electronic Medicines Compendium website: <u>www.medicines.org.uk</u> and BNF <u>www.bnf.org</u>				

	The following side effects are listed in the product SPC/BNF as very common or common with flucloxacillin (but may not reflect all reported side effects): • Diarrhoea • Nausea • Skin rash
	 Hypersensitivity Vomiting Thrombocytopenia (low levels of platelets in the blood) Severe adverse reactions are rare, but <u>anaphylaxis</u> (delayed or immediate) has been reported and requires immediate medical treatment. In the event of a severe adverse reaction, the individual must be
Management of and reporting procedure for adverse reactions	 advised to stop treatment immediately and seek urgent medical advice. Healthcare professionals and individuals/carers/parents/guardians are encouraged to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme on: https://yellowcard.mhra.gov.uk Record all adverse drug reactions (ADRs) in the individual's clinical record. Report via organisation incident policy. It is considered good practice to notify the individual's GP in the
Written information to be given to individual/carer/parent/ guardian	 event of an adverse reaction. Provide marketing authorisation holder's information leaflet (PIL) provided with the product. Provide safety netting advice and advise individual/carer/parent/guardian of alternative treatment available using <u>TARGET self-care leaflet</u>. Utilise <u>TARGET antibiotic checklist</u> for counselling individuals/carers/parents/guardians. Give any additional information in accordance with the service specification.
Individual advice / follow up treatment	 Explain dose, frequency and method of administration. The individual/carer/parent/guardian should be advised to read the PIL. Store reconstituted oral solution (or oral suspension) in accordance with the conditions as outlined in the individual product <u>SPC</u> (storage recommendations may vary between different reconstituted oral solution (or oral suspension) products). Initial pain and swelling as result of an insect bite should be managed with appropriate over the counter (OTC) pain relief such as paracetamol or ibuprofen (where appropriate), and the use of a cold compress (flannel or cloth cooled with cold water) over the affected area. Oral antihistamines (e.g. chlorphenamine [sedating]) or topical corticosteroids (e.g. hydrocortisone 1%) may help reduce itching but use is off-label and good quality evidence supporting its use is



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	 lacking. Seek medical attention immediately if condition deteriorates and/or the individual becomes systemically unwell Advise individual that if rash or other signs of hypersensitivity occur, stop taking the medicine and seek immediate medical advice Hygiene measures are important to aid healing It is recommended that the individual Avoids scratching affected areas, and keeps fingernails clean and cut short, wear cotton gloves if necessary Keep hands clean before and after touching the skin Advise that flucloxacillin is a penicillin related antibiotic Advise individual/carer/parent/guardian to take the medication at regular intervals and to finish the course. Advise to give/take the capsules or oral solution (or oral suspension) with a glass of water and not to lie down immediately after taking (to reduce the risk of oesophageal pain after taking). Advise individual/carer/parent/guardian that flucloxacillin should be taken on an empty stomach. This means one hour before for food or two hours after food. If dose is missed advise to refer to the PIL supplied with the product Inform individual/carer/parent/guardian to complete the full course even if symptoms improve. Advise individual/carer/parent/guardian to remove visible stingers as quickly as possible by scraping sideways with a fingernail, a piece of card or a credit card. Advise individual/carer/parent/guardian to seek medical attention if symptoms do not improve after completion of antibiotic treatment course. Advise individual/carer/parent/guardian to seek immediate medical attention if symptoms of sepsis. Advise individual/carer/parent/guardian to seek immediate medical attention if odays. Advise individual/carer/parent/guardian to seek immediate medical attention on ormal, and full resolution of skin redness and itch may take up to 10 days. The individual/carer/parent/guardian should be advise
Records	Appropriate records must include the following:
	 That valid informed consent has been given Individual's name, address and date of birth Name of GP individual is registered with or record where an individual is not registered with a GP Name and registration number of registered healthcare professional
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Key references

Key references (last accessed November 2023)	 Electronic Medicines Compendium <u>http://www.medicines.org.uk/</u> Electronic BNF <u>https://bnf.nice.org.uk/</u> Electronic BNF for children <u>https://bnfc.nice.org.uk/</u> Reference guide to consent for examination or treatment <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploa</u> <u>ds/attachment_data/file/138296/dh_103653_1pdf</u> Medicines for Children "Flucloxacillin in bacterial infections" <u>https://www.medicinesforchildren.org.uk/medicines/flucloxacillin-for- bacterial-infections/</u> NICE Medicines practice guideline "Patient Group Directions" <u>https://www.nice.org.uk/guidance/mpg2</u> NICE Clinical Guidance 141 "Cellulitis and erysipelas: antimicrobial
	 prescribing NG141" <u>https://www.nice.org.uk/guidance/ng141</u> NICE Clinical Knowledge Summaries "Insect Bites and Stings" <u>https://cks.nice.org.uk/topics/insect-bites-stings/</u> NICE Clinical Knowledge Summaries "Acute Cellulitis" <u>https://cks.nice.org.uk/topics/cellulitis-acute/</u> Specialist Pharmacy Service: Flucloxacillin Lactation Safety Information <u>https://www.sps.nhs.uk/medicines/flucloxacillin/</u> TARGET Self-care leaflet. <u>Leaflets to discuss with patients: Self-care</u> <u>Leaflet (rcgp.org.uk)</u>



Appendix A – example registered health professional authorisation sheet (example – local versions/electronic systems may be used)

PGD Name/Version Valid from: Expiry:

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

Registered health professional

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 and professional code of conduct.

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.

Name	Designation	Signature	Date

Authorising manager

I confirm that the registered health professionals 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 registered health professionals to prevent additions post managerial authorisation.

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

Add details on how this information is to be retained according to organisation PGD

policy.