Pharmacy First: Infected Insect Bites

NICE NG182 + NG141 | NHS England Pharmacy First PGDs 4a/4b/4c v1.1 (Oct 2025)

REFER NOW: Red Flags

- ☐ Anaphylaxis, angio-oedema, or airway compromise: call 999 immediately
- ☐ Bite in mouth, throat, or around the eyes: A&E urgently
- ☐ Sepsis suspected or systemically very unwell: call 999
- ☐ Severely immunocompromised with infection signs: A&E urgently
- ☐ Previous systemic allergic reaction to same bite type: A&E urgently
- ☐ Erythema migrans or suspected Lyme disease: refer to GP urgently

ALL tick bites: refer to GP. Do not supply under PGD 4a, 4b or 4c.

CHECK: Eligibility Before Supply

- ☐ Age 1 year and over (under 1: refer to GP)
- ☐ Infection present or worsening 48+ hours after bite, with 3 or more of: redness, pain or tenderness, swelling, warmth or hot skin AND spreading redness/swelling or pustular discharge
- ☐ No systemic illness: if systemically unwell, do not supply; urgent same-day prescriber assessment
- ☐ No liver disease or flucloxacillin-associated jaundice (PGD 4a excluded)
- ☐ No MRSA. No travel outside UK with insect-borne disease concern.
- ☐ No comorbidity likely to delay resolution (peripheral arterial disease, chronic venous insufficiency, lymphoedema, or morbid obesity): refer to GP
- ☐ No severe pain out of proportion, significant pus/fluid, numbness/tingling, human/animal bite, contaminated wound, unusual/exotic insect, or failed antibiotic for this episode
- ☐ No CKD stage 5 (eGFR below 15). No inability to absorb oral medicines. No ketogenic diet (excluded under all antibiotic PGDs).
- ☐ Pregnancy under 16: refer to GP. Pregnant aged 16+ without penicillin allergy: flucloxacillin pathway if otherwise eligible. Pregnant aged 16+ with penicillin allergy: check PGD 4c if locally authorised.

Antibiotic Selection and Doses (all courses 5 days)

Patient group	Antibiotic (PGD)	Dose and frequency
First line (all ages 1+, no allergy)	Flucloxacillin (4a)	1-2 yrs: 125mg QDS / 2-9 yrs: 250mg QDS / 10yrs+: 500mg QDS for 5 days. Empty stomach (1 hr before or 2 hrs after food).
Penicillin allergy, not pregnant	Clarithromycin (4b)	Weight-banded dose, see PGD 4b, for 5 days. Not in pregnancy. Exclude CKD stage 4/5.
Aged 16+, penicillin allergy, pregnant	Erythromycin (4c) if locally authorised	Erythromycin 500mg QDS for 5 days. Clarithromycin excluded in pregnancy. Exclude CKD stage 5.

Before supplying: Flucloxacillin (4a): must not supply with methotrexate (any dose), voriconazole, or probenecid. Do not supply to patients on paracetamol at risk of high anion gap metabolic acidosis (malnutrition, sepsis, or renal impairment). Check oral typhoid vaccine. Clarithromycin (4b): check QT-prolonging medicines, myasthenia gravis, simvastatin, lovastatin, significant heart disease, severe liver disease; not in pregnancy. Erythromycin (4c): check QT-prolonging medicines, OACs, calcium-channel blockers, digoxin, medicines causing hypokalaemia, strong CYP inducers, myasthenia gravis, severe liver disease. Warfarin: INR monitoring with all three antibiotics. Note: erythema may be less visible on darker skin - assess warmth, swelling, and tenderness carefully. Draw border around erythema and document at assessment. Safety-net: return if no improvement within 48-72 hrs of starting antibiotics or if spreading worsens.