

Penicillin allergy de-labelling (PADL) in primary care protocol

Purpose

Many patients have a penicillin allergy (penA) record in their medical notes, but over 95% of these individuals can safely take penicillin. This protocol helps identify and safely de-label patients incorrectly recorded as penicillin-allergic, ensuring they have access to first-line antibiotic treatments when needed.

Step 1: Identifying eligible patients

Using GP care records, identify patients with a penA record who have received a penicillin antibiotic after the allergy was recorded.

Penicillin antibiotics include:

- Amoxicillin
- Phenoxymethylpenicillin
- Co-amoxiclav
- Pivmecillinam
- Ampicillin
- Co-fluampicil
- Flucloxacillin

Step 2: Patient assessment

Telephone consultation

Contact the patient and take a penicillin allergy-focused history and record using the following questions:

- ✓ Which penicillin did you react to?
- ✓ Do you remember the details of the reaction?
- ✓ How many hours after taking the first dose did the reaction occur?
- ✓ How many years ago did this happen?
- ✓ How was the reaction managed, and what was the outcome?
- ✓ You were prescribed [antibiotic] on [date]. Did you take them, and if so, did you have any side effects?

Use the answers to these questions to put the patient into a risk category using the antibiotic allergy assessment tool (AAAT) below.

Patients should be excluded if they cannot provide a reliable history because they seem confused, don't understand what is being asked of them, or their account of their allergy history is contradictory.

Patients categorised as high risk (red in the tool below) based on their history will also be excluded at this stage.

Practices are encouraged to make 3 reasonably spaced attempts to contact each patient. If a patient cannot be contacted after 3 attempts, record them as not contactable.

Step 3: De-labelling process

Patients in the low-risk category (based on history) can be de-labelled after counselling and obtaining informed consent.

Key Counselling Points

- Around 10% of people have a penicillin allergy record, but most are not truly allergic.
- More than 95% of patients with a penA record can safely take penicillin.
- Many cases result from misdiagnosis, as rashes can occur due to viral or bacterial infections rather than the antibiotic itself.
- Some individuals "outgrow" their penicillin allergy over time.
- Patients with a low-risk history have no greater chance of a severe reaction than someone without an allergy record. The risk of anaphylaxis is 1 in 150,000, while mild rashes occur in 1-2% of cases.
- Penicillin antibiotics are first-line treatments for many common infections in community and hospital settings because they are effective and well-tolerated. Retaining an incorrect penicillin allergy record unnecessarily denies you first-line antimicrobial care.

Incorrect allergy records limit treatment options and may result in less effective antibiotics being used.

Step 4: Updating patient records

With patient consent, the penA record can be removed from GP records.

If possible, a follow-up message should be sent to the patient to confirm the change.

Inform the patient's usual dispensing site that the allergy label has been removed.

Dermatological				Respiratory or systemic				Unknown			
Skin manifestation		Recommendation and resultant allergy type		Clinical manifestation		Recommendation and resultant allergy type		Clinical manifestation		Recommendation and resultant allergy type	
Childhood exanthem (unspecified) <i>mild rash with no severe features</i>		☐	Unlikely to be significant (non-severe)	Laryngeal involvement ("throat tightness" or "hoarse voice")		☐	Immediate hypersensitivity (severe)	Unknown reaction ≤ 10 years ago		☐	Unknown (likely non-severe)
Immediate diffuse rash ("itchy immediate rash") <i><2 hours post dose</i>		☐	Immediate hypersensitivity (likely non-severe)					Unknown reaction > 10 years ago or family history of penicillin allergy only		☐	Unlikely to be significant (non-severe)
Diffuse rash or localised rash/swelling with no other symptoms	>10 years ago or unknown	☐	Delayed hypersensitivity (non-severe)	Respiratory compromise ("shortness of breath")		☐	Immediate hypersensitivity (severe)	Renal			
	≤ 10 years ago	☐	Delayed hypersensitivity (likely non-severe)	Fever ("high temperature") <i>Not explained by infection</i>		☐	Delayed hypersensitivity (severe)	Severe renal injury, failure or AIN (>50% reduction in eGFR from baseline or absolute serum creatinine increase of ≥26.5µmol/L, or transplantation, or dialysis)		☐	Potential immune mediated (severe)
Angiodema ("lip, facial or tongue swelling")		☐	Immediate hypersensitivity (severe)	Anaphylaxis or unexplained collapse		☐	Immediate hypersensitivity (severe)	Mild renal impairment (Does not meet criteria in box above)		☐	Unlikely immune mediated (non-severe)
Generalised swelling (outside of angiodema)		☐	Delayed hypersensitivity (severe)	Haematological				Liver			
Urticaria ("wheals and hives")		☐	Immediate hypersensitivity (potentially severe)	Low platelets <150x10 ⁹ /L or unknown		☐	Potential immune mediated (severe)	Severe liver injury, failure or DILI (≥5x upper limit of normal (ULN) for ALT or AST, or ≥3x ULN for ALT with ≥2x ULN for bilirubin, or ≥2x ULN for ALP, or transplant)		☐	Potential immune mediated (severe)
				Low neutrophils <1x10 ⁹ /L or unknown		☐	Potential immune mediated (severe)	Mild hepatic enzyme derangement (Does not meet criteria in box above)		☐	Unlikely immune mediated (non-severe)
Mucosal ulceration ("mouth, eye or genital ulcers")		☐	Delayed hypersensitivity (severe)	Low haemoglobin <100 g/L or unknown		☐	Potential immune mediated (severe)	Gastrointestinal, neurological or infusion-related			
Pustular, blistering or desquamating rash ("skin shedding")		☐	Delayed hypersensitivity (severe)	Eosinophilia (>0.7 x 10 ⁹ /L or unknown)		☐	Delayed hypersensitivity (severe)	Gastrointestinal symptoms without other organ system symptoms ("nausea, vomiting, diarrhoea")		☐	Unlikely immune mediated (non-severe)
								Mild neurological manifestation ("headache, depression, mood disorder")		☐	Unlikely immune mediated (non-severe)
Appropriate for direct de-labelling – remove allergy label						Low Risk		Severe neurological manifestation ("seizures or psychosis")		☐	Unknown or unclear mechanism
Appropriate for de-labelling if evidence of subsequent tolerance of any penicillin antibiotic						Low Risk					
Appropriate for outpatient antibiotic allergy assessment +/- testing						High Risk					

Version control

Version number	Revision date	Revision by	Nature of revisions
1.0	August 2026	Chris Burgin Stacie Tregonning Joanna Lawrence	Adapted from PMOS 2025/26 support document. References to submitting data using searches and forms provided by the medicines optimisation team removed.

Review by September 2027