

# Penicillin allergies

## Action plan for clinicians



**NCAS**  
National Centre for  
Antimicrobial Stewardship



**CAAR**  
Centre for  
Antibiotic Allergy  
and Research

### Penicillin allergy assessment questions

- What was the name of the penicillin?
- What were the details of the reaction?
- How was the reaction managed? Did it require treatment or hospitalisation?
- How long after taking the antibiotic did the reaction occur? How many years ago did the reaction occur?
- What antibiotics have been tolerated since?

### Nature of the reaction

Nausea, vomiting, headache,  
dizziness, diarrhoea

**Side effect, not an allergy**

Non-severe skin rash alone  
(maculopapular or benign childhood rash).  
Usually >24 hours after starting antibiotic

**Delayed non-severe allergy**

Localised or mild urticarial rash  
(itchy hives), typically  
within 2 hours of dose

**Immediate non-severe allergy**

Anaphylaxis, hypotension, collapse, airway  
and/or tongue swelling,  
respiratory involvement,  
widespread urticarial rash (extensive hives  
all over the body)

**Immediate severe allergy**

Severe Cutaneous Adverse Reactions, i.e.  
SJS, TEN, AGEP and DRESS  
OR interstitial nephritis OR severe liver  
injury

**Delayed severe allergy**

### Action

**Safe to prescribe penicillins**

Remove penicillin allergy from  
patients medical record

**Avoid** penicillins

**Safe to prescribe cephalosporins\*,  
carbapenems and aztreonam**

Consider oral  
penicillin rechallenge  
in hospitalised  
patients

**Avoid** penicillins

**Safe to prescribe cephalosporins^,  
carbapenems and aztreonam**

Consider referral to  
an allergy specialist  
for oral penicillin  
challenge +/- skin  
testing

**Avoid** penicillins

In community practice, **avoid all  
cephalosporins**

In hospital practice, **avoid cefalexin and  
cefactor** if allergic to amoxicillin or ampicillin.  
**Other cephalosporins, carbapenems or  
aztreonam may be prescribed**

**Avoid** penicillins **AND** cephalosporins

**Seek specialist allergy advice before  
prescribing aztreonam or carbapenems,  
or use non beta-lactam antibiotics**

\*Consider avoiding cefalexin and cefactor if allergic to amoxicillin or ampicillin

^Avoid cefalexin and cefactor if allergic to amoxicillin or ampicillin