Reasonable, but less studied, options for β-lactam allergic patients include doxycycline (PO) and minocycline (PO).

Note: Antibiotics are not recommended when adequate drainage has been achieved. If unable to achieve optimal drainage and these options are used, consider adding metronidazole for anaerobic coverage.

Management of Penicillin/Amoxicillin Allergic Patients in Dental Practice

Is there a need for antibiotic therapy or prophylaxis?
- NO → No further action needed
- YES → Is there a history of penicillin/amoxicillin allergy?
  - NO → Penicillin and amoxicillin safe to prescribe
  - YES → Since being labeled with an allergy has the patient tolerated a regimen of...
    - Penicillin and amoxicillin safe to prescribe
    - Amoxicillin safe to prescribe (avoid penicillin)

What was the nature of the reaction?
- Non-Allergic Side Effects
  - Diarrhea
  - Nausea
  - Vomiting
  - Abdominal pain
  - Headache
  - Dizziness
- Acute Allergic Reaction
  - Hives
  - Urticaria
  - Angioedema
  - Hypotension
  - Breathing difficulty
- Delayed Allergic Reaction
  - Maculopapular rash
  - Non-pruritic morbilliform rash

Severe Organ Dysfunction
- ICU admission related to allergy
- Interstitial nephritis
- Hepatitis
- Hemolytic anemia

Severe Skin Manifestations
- Stevens-Johnson syndrome
- Toxic epidermal necrolysis
- Exfoliative dermatitis
- Acute generalized exanthematous pustulosis (AGEP)
- Eosinophilic drug rash with systemic symptoms (DRESS)

Management
1. Cefuroxime (PO), cefazolin (IV/IM) and ceftriaxone (IV/IM) considered safe β-lactam options
2. Assess risk-benefit ratio of using non-β-lactam option*
3. Consider referral for allergy testing to ensure optimal antibiotic prescribing for future appointments

Avoid ALL β-lactam antibiotics* (including penicillin and amoxicillin)

*NOTE: Clindamycin is associated with a significant adverse events profile (especially C. difficile infection). Prescribing requires a risk vs. benefit assessment.
Refer to [www.bugsanddrugs.org](http://www.bugsanddrugs.org) for best practice recommendations and to confirm whether your patient requires an antibiotic.

If your patient states they have a penicillin allergy, consider asking the following questions:

**Do you have an allergy to penicillin?**
- True penicillin allergy is infrequent. About 10% of people report allergy to penicillin but less than 1% of people have a true allergy.
- Penicillin allergies are not genetic; a relative with an allergy does not prohibit use.

**When was the last time you had penicillin?** Half of patients with IgE-mediated penicillin allergy lose their sensitivity after five years (80% after 10 years).

**What was the nature of your reaction?** In children, a rash occurring during a viral infection and concurrent amoxicillin therapy is not indicative of an allergy.

**Have you previously tolerated amoxicillin, ampicillin, amoxicillin-clavulanate, or cephalixin?** See reverse side for recommendations in prescribing based on past history of antibiotic use.

**Were you ever hospitalized due to a penicillin reaction?** See reverse side for contraindications for penicillin based on medical history.

Use the patient information to follow the allergy management tool on the reverse side.

Provide the patient with education materials (available at [www.dobugsneeddrugs.org](http://www.dobugsneeddrugs.org)).

**Seven actions you can take to fight antibiotic resistance**

- Don’t prescribe antibiotics for irreversible pulpitis.
- Don’t prescribe antibiotics for acute dental abscess without signs of systemic involvement.
- Don’t give prophylactic antibiotics prior to dental procedures with total joint replacement.
- Limit pre-operative antibiotics to a single dose.
- Don’t give prophylactic antibiotics to patients with non-valvular cardiac or other indwelling devices.
- Use penicillin rather than amoxicillin as drug of first choice for most indications.
- Use this allergy management tool to avoid over-use of clindamycin.

**For more information**

- Patient information resources available to print from [www.dobugsneeddrugs.org](http://www.dobugsneeddrugs.org)
- References available at [www.dobugsneeddrugs.org](http://www.dobugsneeddrugs.org)
- Please direct any comments or feedback on allergy management tool to dbnd@bccdc.ca