

The Penicillin **Allergy Clinic**

Dear Pediatrician.

As of September 2020, our clinic will begin testing patients in Winnipeg for true Penicillin/Amoxicillin allergy in an attempt to de-label all false allergies. Up to 10% of children are labelled as β -lactam allergic but instead developed rashes due to viral exanthems or virus-drug interactions of no consequence [1]. This leads to the unnecessary avoidance of Penicillin/Amoxicillin in place of more expensive broad-spectrum antibiotics when Amoxicillin and Penicillin have shown to be the most effective antibiotics for streptococcal pharyngitis and otitis media [2,3]. Choosing Wisely recommends ALL patients with a Penicillin allergy be referred for testing [4].

Our de-labelling process is incredibly safe and requires only a few hours of the patient's time. Our process allows us to de-label low risk patients which is the majority of patients who carry a Penicillin or Amoxicillin allergy label. Any patients we deem higher risk who are unable to be de-labelled at our clinic will be referred to an allergist for further management. We do not offer skin testing as the most recent studies and guidelines state that skin-prick and intra-dermal testing are not required for a majority of patients who are at low-risk for a Penicillin/Amoxicillin allergy. There are numerous benefits to you and your patients by removing their Penicillin/Amoxicillin allergy such as...

Benefits to Patients by Removing Penicillin/Amoxicillin Allergy

- Reduced risk (55%) of methicillin-resistant *Staphyloccocus aureus* (MRSA) [5]
- Reduced risk (35%) of *Clostridium difficile* infection [5]
- Reduced Vancomycin use [6]
- Reduced length of hospital stay [6]
- Reduced antimicrobial resistance [6]

Benefits to Healthcare System by Removing Penicillin/Amoxicillin Allergy

- Average antibiotic costs per patient decreased from \$1,265.81 to \$592.08 USD, a 53% savings [7]
- Reduced antibiotic prescription costs from \$14-193 per patient [8]
- Inpatient costs savings were \$1145-\$4254 per patient when Penicillin allergy was removed [8]

To provide your patients the best possible care and reduce healthcare costs, please fax a consult to 1-888-736-1743 addressed to the 'The Penicillin Allergy Clinic'.

Sincerely,

Dr. Norm Silver, FRCPC Pediatrician/Emergency Physician

Dr. Taft Micks, CCFP(EM) Family/Emergency Physician

References
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^{4.} Choosing Wisely. American Academy of Allergy, Asthma & Immunology. https://www.choosingwisely.org/clinician-lists/american-academy-allergy-asthma-immunology-non-beta-lactam-

antibiotics-penicillin-allergy/ 5. Blumental KG, Lu N, Zhang Y, et al. Risk of methicillin resistant Staphyloccocus aureus, and Clostridium difficile in patients with a documented penicillin allergy: population based matched cohort study. BMJ 2018;361:k2400 6. Jones BM, Bland CM. Penicillin skin testing as an antimicrobial stewardship initiative. Am J Health-Syst Pharm. 2017;74:232-7

^{7.} Chen JR, Tarver SA, Alvarez KS, Wei W, Khan DA. Improving aztreonam stewardship and cost through a pencillin allergy testing clinical guideline. Open Forum Infect Dis. 2018 May 5;5(6) 8. Mattingly II TJ, Fulton A, Lumish RA, Wiliams AMC, Yoon SJ, Yuen M, et al. The Cost of Self-Reported Penicillin Allergy: A Systematic Review. J Allergy Clin Immunol Pract 2018;6:1649-54