

If a conflict arises between a Clinical Payment and Coding Policy and any plan document under which a member is entitled to Covered Services, the plan document will govern. If a conflict arises between a CPCP and any provider contract pursuant to which a provider participates in and/or provides Covered Services to eligible member(s) and/or plans, the provider contract will govern. "Plan documents" include, but are not limited to, Certificates of Health Care Benefits, benefit booklets, Summary Plan Descriptions, and other coverage documents. Blue Cross and Blue Shield of Illinois may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSIL has full and final discretionary authority for their interpretation and application to the extent provided under any applicable plan documents.

Providers are responsible for submission of accurate documentation of services performed. Providers are expected to submit claims for services rendered using valid code combinations from Health Insurance Portability and Accountability Act approved code sets. Claims should be coded appropriately according to industry standard coding guidelines including, but not limited to: Uniform Billing Editor, American Medical Association, Current Procedural Terminology, CPT® Assistant, Healthcare Common Procedure Coding System, ICD-10 CM and PCS, National Drug Codes, Diagnosis Related Group guidelines, Centers for Medicare and Medicaid Services National Correct Coding Initiative Policy Manual, CCI table edits and other CMS guidelines.

Claims are subject to the code edit protocols for services/procedures billed. Claim submissions are subject to claim review including but not limited to, any terms of benefit coverage, provider contract language, medical policies, clinical payment and coding policies as well as coding software logic. Upon request, the provider is urged to submit any additional documentation.

Onychomycosis Testing

Policy Number: CPCPLAB068

Version 1.0

Approval Date: September 5, 2025

Plan Effective Date: January 1, 2026

Description

The Plan has implemented certain lab management reimbursement criteria. Not all requirements apply to each product. Providers are urged to review Plan documents for eligible coverage for services rendered.

Reimbursement Information

1. For individuals with signs of onychomycosis, direct microscopic examination with potassium hydroxide, fungal culture of desquamated subungual material, or fungal stain of a nail clipping(s) **may be reimbursable**.
2. For individuals with onychomycosis and for whom anti-fungal therapy has failed to resolve infection, nucleic acid amplification testing/NAAT **may be reimbursable**.
3. To screen for, diagnose, or confirm onychomycosis, NAAT (See **Note 1**), **is not reimbursable**.
4. To screen for, diagnose, or confirm onychomycosis attenuated total-reflectance Fourier transform infrared/ATR-FTIR spectroscopy **is not reimbursable**.
5. Testing for the presence of fungal-derived sterols, (e.g., ergosterol), **is not reimbursable**.

Note 1: Nucleic acid testing (e.g., PCR, PCR-RFLP, and next-generation sequencing/NGS) of the following microorganisms: *Candida* species, *Aspergillus* species, *Trichophyton rubrum*, *Trichophyton mentagrophytes*, *Epidermophyton floccosum*, *Neoscytalidium dimidiatum*, *Onychocola canadensis*, *Scopulariopsis* species, *Alternaria* species, *Acremonium* species, and *Fusarium* species (1-3).

Procedure Codes

The following is not an all-encompassing code list. The inclusion of a code does not guarantee it is a covered service or eligible for reimbursement.

Codes
82542, 87101, 87149, 87150, 87153, 87205, 87206, 87220, 87480, 87481, 87482, 87798, 87800, 87801, 88312, 88749

References

1. Wollina U, Nenoff P, Haroske G, Haenssle HA. The Diagnosis and Treatment of Nail Disorders. *Dtsch Arztebl Int.* Jul 25 2016;113(29-30):509-18. doi:10.3238/arztebl.2016.0509
2. Bongomin F, Batac CR, Richardson MD, Denning DW. A Review of Onychomycosis Due to *Aspergillus* Species. *Mycopathologia.* Jun 2018;183(3):485-493. doi:10.1007/s11046-017-0222-9
3. Ameen M, Lear JT, Madan V, Mohd Mustapa MF, Richardson M. British Association of Dermatologists' guidelines for the management of onychomycosis 2014. *Br J Dermatol.* Nov 2014;171(5):937-58. doi:10.1111/bjd.13358
4. Gupta AK, Versteeg SG, Shear NH. Onychomycosis in the 21st Century: An Update on Diagnosis, Epidemiology, and Treatment. *J Cutan Med Surg.* Nov/Dec 2017;21(6):525-539. doi:10.1177/1203475417716362
5. Lipner SR, Scher RK. Onychomycosis: Clinical overview and diagnosis. *J Am Acad Dermatol.* Apr 2019;80(4):835-851. doi:10.1016/j.jaad.2018.03.062
6. Koo SH, Teoh YL, Koh WL, et al. Development and validation of a real-time multiplex PCR assay for the detection of dermatophytes and *Fusarium* spp. *J Med Microbiol.* Nov 2019;68(11):1641-1648. doi:10.1099/jmm.0.001082
7. Bodman MA, Krishnamurthy K. Onychomycosis. *StatPearls.* StatPearls Publishing LLC.; 2022.
8. Achterman RR, White TC. Dermatophytes. *Curr Biol.* Jul 8 2013;23(13):R551-2. doi:10.1016/j.cub.2013.03.026
9. Abdallah NA, Said M, Mahmoud MT, Omar MA. Onychomycosis: Correlation between the dermoscopic patterns and fungal culture. *J Cosmet Dermatol.* Sep 10 2019;doi:10.1111/jocd.13144
10. Angulo-Rodríguez A, Hernández-Ramírez H, Vega-Memije ME, Toussaint-Caire S, Moreno-Coutiño G. Subclinical Onychomycosis in Apparently Healthy Adults. *Skin Appendage Disord.* Apr 2021;7(3):180-182. doi:10.1159/000513316
11. Ghannoum M, Mukherjee P, Isham N, Markinson B, Rosso JD, Leal L. Examining the importance of laboratory and diagnostic testing when treating and diagnosing onychomycosis. *Int J Dermatol.* Feb 2018;57(2):131-138. doi:10.1111/ijd.13690
12. Trevisan F, Werner B, Pinheiro RL. Nail clipping in onychomycosis and comparison with normal nails and ungual psoriasis. *An Bras Dermatol.* Jul 29 2019;94(3):344-347. doi:10.1590/abd1806-4841.20198301
13. Daggett C, Brodell RT, Daniel CR, Jackson J. Onychomycosis in Athletes. *Am J Clin Dermatol.* Oct 2019;20(5):691-698. doi:10.1007/s40257-019-00448-4
14. Rios-Yuil JM. Onychomycosis Laboratory Diagnosis: Review. *Current Fungal Infection Reports.* 2017;11(3)
15. Arndt K, LeBoit P, Wintroub B. Onychomycosis: Diagnosis, Treatment, and Prevention Strategies *Seminars in Cutaneous Medicine and Surgery.* 3. 2016;35. https://www.globalacademycme.com/sites/default/files/documents/cme_activity/scms_supl_onychomycosis0316_v7_web.pdf
16. Ipsum Diagnostics. PCR TESTING. <https://ipsumdiagnostics.com/homepage/pcr-testing/>
17. SSI. Instructions For Use PCR KITS. <https://ssidiagnostica.com/international/solutions/pcr/>

18. LabCorp. Fungus (Mycology) Culture.
<https://www.labcorp.com/tests/008482/fungus-mycology-culture>
19. MicroGenDX. Podiatry Nail/Wound Care <https://microgendx.com/podiatry-nail/>
20. Vikor. Nail-ID™. <https://www.vikorscientific.com/test-menu/nail-id/>
21. EuroImmun. EUROArray Dermatomycosis. <https://www.dermatophyte-pcr.com/physicians-laboratories/euroarray-method.html>
22. BakoDx. Onychodystrophy PCR Testing.
<https://bakodx.com/services/onychodystrophy-pcr-test-terbinafine-resistance/>
23. Leung K, J ML, Leong KF, et al. Onychomycosis: An Updated Review. *Recent Pat Inflamm Allergy Drug Discov.* Oct 25 2020;doi:10.2174/1872213x13666191026090713
24. Gupta AK, Versteeg SG, Shear NH, Piguet V, Tosti A, Piraccini BM. A Practical Guide to Curing Onychomycosis: How to Maximize Cure at the Patient, Organism, Treatment, and Environmental Level. *Am J Clin Dermatol.* Feb 2019;20(1):123-133. doi:10.1007/s40257-018-0403-4
25. Aly R, Winter T, Hall S, Vlahovic T. Topical Tavaborole in the Treatment of Onychomycosis Complicated by Dermatophytoma: A Post-hoc Assessment of Phase II Subjects. *J Drugs Dermatol.* Mar 1 2018;17(3):347-354.
26. Carney C, Tosti A, Daniel R, et al. A new classification system for grading the severity of onychomycosis: Onychomycosis Severity Index. *Arch Dermatol.* Nov 2011;147(11):1277-82. doi:10.1001/archdermatol.2011.267
27. Bao F, Fan Y, Sun L, et al. Comparison of fungal fluorescent staining and ITS rDNA PCR-based sequencing with conventional methods for the diagnosis of onychomycosis. *J Eur Acad Dermatol Venereol.* Jun 2018;32(6):1017-1021. doi:10.1111/jdv.14843
28. Lubis NZ, Muis K, Nasution LH. Polymerase Chain Reaction-Restriction Fragment Length Polymorphism as a Confirmatory Test for Onychomycosis. *Open Access Maced J Med Sci.* Feb 15 2018;6(2):280-283.
29. Joyce A, Gupta AK, Koenig L, Wolcott R, Carviel J. Fungal Diversity and Onychomycosis An Analysis of 8,816 Toenail Samples Using Quantitative PCR and Next-Generation Sequencing. *J Am Podiatr Med Assoc.* Jan 2019;109(1):57-63. doi:10.7547/17-070
30. Gustafson E, Bakotic W, Bennett L, Page L, McCarthy L. DNA-based detection for onychomycosis correlates better to histopathology than does fungal culture. *Dermatol Online J.* Jul 15 2019;25(7)
31. De Bruyne S, Speeckaert R, Boelens J, Hayette MP, Speeckaert M, Delanghe J. Infrared spectroscopy as a novel tool to diagnose onychomycosis. *Br J Dermatol.* Mar 2019;180(3):637-646. doi:10.1111/bjd.17199
32. Ho WT, Li Y, Yang S. Liquid chromatography-tandem mass spectrometry is effective for analysis of ergosterol in fungal-infected nails. *Clin Exp Dermatol.* Jun 2019;44(4):e133-e139. doi:10.1111/ced.13933
33. Mourad B, Ismail M, Hawwam S, Msseha M, Hassan R. Evaluation Of The Efficacy Of Fluorescent Staining And Chicago Sky Blue Staining As Methods For Diagnosis Of Dermatophytosis In Hair And Nails. *Clin Cosmet Investig Dermatol.* 2019;12:751-758. doi:10.2147/ccid.S215661

34. Caldwell B, Uchmanowicz K, Kawalec JS, Petrofski S, Kurzel C. Commercial Multiplex Polymerase Chain Reaction versus Periodic Acid-Schiff Testing for the Diagnosis of Onychomycosis. *J Am Podiatr Med Assoc*. Nov 1 2020;110(6)doi:10.7547/18-048
35. Romaszkievicz A, Bykowska B, Zablotna M, Sobjanek M, Slawinska M, Nowicki RJ. The prevalence and etiological factors of onychomycosis in psoriatic patients. *Postepy Dermatol Alergol*. Jun 2018;35(3):309-313. doi:10.5114/pdia.2017.68299
36. Gallo L, Cinelli E, Fabbrocini G, Vastarella M. A 15-year retrospective study on the prevalence of onychomycosis in psoriatic vs non-psoriatic patients: A new European shift from dermatophytes towards yeast. *Mycoses*. Aug 2019;62(8):659-664. doi:10.1111/myc.12925
37. Velasquez-Agudelo V, Cardona-Arias JA. Meta-analysis of the utility of culture, biopsy, and direct KOH examination for the diagnosis of onychomycosis. *BMC Infect Dis*. Feb 22 2017;17(1):166. doi:10.1186/s12879-017-2258-3
38. Gupta AK, Versteeg SG, Shear NH. Confirmatory Testing Prior to Initiating Onychomycosis Therapy Is Cost-Effective. *J Cutan Med Surg*. Mar/Apr 2018;22(2):129-141. doi:10.1177/1203475417733461
39. Martinez-Herrera EO, Arroyo-Camarena S, Tejada-Garcia DL, Porras-Lopez CF, Arenas R. Onychomycosis due to opportunistic molds. *An Bras Dermatol*. May-Jun 2015;90(3):334-7. doi:10.1590/abd1806-4841.20153521
40. Haghani I, Shams-Ghahfarokhi M, Dalimi Asl A, Shokohi T, Hedayati MT. Molecular identification and antifungal susceptibility of clinical fungal isolates from onychomycosis (uncommon and emerging species). *Mycoses*. Feb 2019;62(2):128-143. doi:10.1111/myc.12854
41. Trave I, Cozzani E, Canepa P, Verdiani S, Parodi A. Real-life applicability of the Euroarray dermatomycosis kit in the diagnosis of onychomycosis. *Mycoses*. 2021;n/a(n/a)doi:10.1111/myc.13405
42. Gupta AK, Wang T, Cooper EA, et al. Clinical Diagnosis and Laboratory Testing of Abnormal Appearing Toenails: A Retrospective Assessment of Confirmatory Testing for Onychomycosis in the United States, 2022-2023. *J Fungi (Basel)*. Feb 13 2024;10(2)doi:10.3390/jof10020149
43. CDC. Ringworm and Fungal Nail Infections Basics. Updated April 24, 2024. <https://www.cdc.gov/ringworm/about/>
44. CDC. Clinical Overview of Ringworm and Fungal Nail Infections. Updated July 15, 2024. <https://www.cdc.gov/ringworm/hcp/clinical-overview/>
45. AAP. Tinea Pedis and Tinea Unguium (Onychomycosis). In: Kimberlin D, Brady M, Jackson M, Long S, eds. *Red Book: 2018 Report of the Committee on Infectious Diseases*. American Academy of Pediatrics; 2018:806-808.
46. AAP. Tinea Corporis. In: Kimberlin D, Brady M, Jackson M, Long S, eds. *Red Book: 2018 Report of the Committee on Infectious Diseases*. American Academy of Pediatrics; 2018:801-804.
47. Bortolussi R, Martin S. Antifungal agents for common outpatient paediatric infections. Updated June 20, 2019. <https://www.cps.ca/en/documents/position/antifungal-agents-common-infections>
48. Westerberg DP, Voyack MJ. Onychomycosis: Current trends in diagnosis and treatment. *Am Fam Physician*. Dec 1 2013;88(11):762-70.

49. Ely JW, Rosenfeld S, Seabury Stone M. Diagnosis and management of tinea infections. *Am Fam Physician*. Nov 15 2014;90(10):702-10.
50. Frazier WT, Santiago-Delgado ZM, Stupka KC, 2nd. Onychomycosis: Rapid Evidence Review. *Am Fam Physician*. Oct 1 2021;104(4):359-367.
51. Lipner SR, Joseph WS, Vlahovic TC, et al. Therapeutic Recommendations for the Treatment of Toenail Onychomycosis in the US. *J Drugs Dermatol*. Oct 1 2021;20(10):1076-1084.

Policy Update History

Approval Date	Effective Date; Summary of Changes
09/05/2025	01/01/2026: New policy.