

Reimbursement Policy

Policy Number: RPLAB068

Policy Title: Onychomycosis Testing

Approval Date: May 15, 2026

Effective Date: Sept. 4, 2026

Policy Disclaimer

If a conflict arises between a Reimbursement 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 reimbursement policy 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's 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 Texas may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSTX has full and final discretionary authority for their interpretation and application to the extent provided under any applicable Plan documents.

Providers are responsible for submitting 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 ICD-10-PCS, National Drug Codes, Diagnosis Related Group guidelines, Centers for Medicare & 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 and procedures billed. Claim submissions are subject to claim review, including but not limited to, any terms of benefit coverage, provider contract language, medical policies, and reimbursement policies, as well as coding software logic. Upon request, the provider is urged to submit any additional documentation.

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.

Code	Description
82542	COL CHROMOTOGRAPHY QUAL/QUAN
87101	SKIN FUNGI CULTURE
87149	DNA/RNA DIRECT PROBE
87150	DNA/RNA AMPLIFIED PROBE
87153	DNA/RNA SEQUENCING

87205	SMEAR GRAM STAIN
87206	SMEAR FLUORESCENT/ACID STAI
87220	TISSUE EXAM FOR FUNGI
87480	CANDIDA DNA DIR PROBE
87481	CANDIDA DNA AMP PROBE
87482	CANDIDA DNA QUANT
87798	DETECT AGENT NOS DNA AMP
87800	DETECT AGNT MULT DNA DIREC
87801	DETECT AGNT MULT DNA AMPLI
88312	SPECIAL STAINS GROUP 1
88749	UNLISTED IN VIVO LAB SERVICE

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Centers for Medicare & Medicaid Services. (2026). Healthcare Common Procedure Coding System (HCPCS) Level II.

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.; 2025.
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

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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 unguis 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. Viktor. Nail-ID™. <https://www.vikorscientific.com/test-menu/nail-id/>
 21. EuroImmuno. EUROArray Dermatophytosis. <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

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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 Invest 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. Romaszkiwicz 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, Porrás-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

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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 January 6, 2026. <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 History

Approval Date	Description
05/15/2026	09/04/2026; Document updated with literature review. No changes. References revised.
04/28/2025	08/08/2025; Document updated with literature review. The following change was made to Reimbursement Information: Added "signs of" to #1 for clarity. No other changes. References revised.
09/13/2024	01/01/2025: New policy.