

The Three-Minute Diabetic Foot Exam: A Simple Intervention with the Power to Save Limbs

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Abstract: Diabetic foot complications remain one of the leading causes of non-traumatic, lower-extremity amputation worldwide. Despite new innovations in wound care, vascular intervention and limb salvage techniques, far too many amputations are preceded by missed opportunities for early detection. This article presents the 3-Minute Diabetic Foot Exam, a structured three-minute commitment to assessment and patient education with the potential to shift care from reactive intervention to proactive preservation.

Key words: *diabetic foot complications, lower-extremity amputation, prevention, limb salvage, assessment, preservation*

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Diabetic foot complications remain one of the leading causes of non-traumatic, lower-extremity amputation worldwide.^{1,2} Despite rapid development of new innovations in wound care, vascular intervention and limb salvage techniques, far too many amputations are preceded by missed opportunities for early detection. Peripheral neuropathy, ischemia and structural foot changes often develop silently, placing patients at risk long before a wound appears.³

To address this gap, ALPS (American Society of Limb Preservation) Founding President Dr. David G. Armstrong and ALPS Founding Clinical Chair Dr. Joseph L. Mills, among others, developed the *3-Minute Diabetic Foot Exam* as a practical assessment tool.⁴

Building on this work, ALPS developed a video campaign to support the dissemination and consistent implementation of this exam in clinical practice.

The [3-Minute Diabetic Foot Exam Video](#) can be viewed here.

Designed For Broad Use

A defining feature of the 3-Minute Diabetic Foot Exam is its accessibility. Designed for broad use, anyone can perform the exam. While grounded in evidence-based principles of diabetic foot assessment, the exam is intentionally designed to be performed by a wide audience. This multi-specialty approach includes: physicians, nurses, podiatrists, vascular specialists, allied health professionals, community health workers, caregivers and family members. Utilization of this exam by a broad and diverse group of caregivers is intended to avoid missed opportunities for identifying and preventing non-traumatic amputations.

The exam focuses on three essential components:⁴

- **What to Ask:** Prior foot wounds or amputations, neuropathic symptoms, glycemic control, smoking history and prior vascular procedures.
- **What to Look For:** Skin breakdown, callus formation, deformity, signs of infection, loss of protective sensation and indicators of impaired perfusion (e.g., pulse palpation, hair growth assessment, temperature differentials).

- **What to Teach:** Daily self-inspection, appropriate footwear and early reporting of changes.

By prioritizing observation, touch and patient engagement rather than specialized equipment, the exam removes common barriers to routine screening and empowers non-specialists to recognize when escalation of care is needed.⁴ A simplified visual overview of the complete 3-Minute Foot Exam is provided in Figure 1. The full clinical workflow, including the downloadable and printable screening tool, is available on the [ALPS website](#) for easy integration into routine practice.



Figure 1: 3-Minute Diabetic Foot Exam Overview

Evidence-Based Foundations And Expert Leadership

The 3-Minute Diabetic Foot Exam Video builds upon foundational work in diabetic limb preservation and responds directly to limitations identified in existing daily practice and published clinical guidelines. In response to the need for more consistent foot examinations, an American Diabetes Association (ADA) task force led by Dr. Armstrong and Dr. Boulton developed the *Comprehensive Foot Examination and Risk Assessment*⁵ in 2008, which established the standard for detailed lower-limb evaluation by specialists.⁴ The comprehensive exam has been in existence for nearly two decades; the 3-minute version was developed to make it implementable on a scale. While the ADA framework remains essential for specialty care, it was not designed for broader implementation across all practice settings, particularly primary care, where time constraints, limited access to specialized equipment and variable training pose significant barriers.⁴

To close this gap, the 3-Minute Diabetic Foot Exam demonstrates that a structured, time-efficient approach can reliably identify patients at risk for ulceration and amputation in overextended or under-resourced clinical environments.⁴ Dr. Armstrong, a leader in diabetic foot research and Founding President of ALPS, has long emphasized that most amputations are preceded by identifiable warning signs that often go unrecognized by patients, particularly in those with neuropathy.³ He has therefore described diabetic foot ulcers as a “silent, sinister syndrome”.³ The exam reinforces this principle, highlighting how systematic screening—even when brief—can meaningfully alter patient trajectories towards functional limb preservation. Similarly, Dr. Mills, Founding Scientific Chair of ALPS, co-developed the WiFi classification system⁶ which stratifies limb threat severity and guides treatment urgency. [Editor’s note: for more information on the WiFi classification system, see article on pgs. 54-59.] Comprehensive diabetic foot assessment frameworks underscore the importance of evaluating neuropathy, vascular status and structural deformity together.⁴

These core elements are embedded in the 3-Minute Diabetic Foot Exam and align with international best practice recommendations, while enabling wider implementation across frontline care settings.

Why Three Minutes Matter In Limb Salvage

Lack of time is often cited as a barrier to performing screening or preventive foot exams. Ironically, the absence of screening frequently leads to downstream complications that demand far more time, resources and cost, including hospitalization, revascularization, prolonged wound care and, ultimately, major limb amputation.¹⁻⁵ The 3-Minute Diabetic Foot Exam reframes prevention in a way that is both feasible and scalable, embedding risk identification into routine clinical workflows rather than relegating it to specialty settings.

The clinical impact of early podiatric and multidisciplinary team evaluation is real and not only theoretical; it is quantifiable. A systematic review and meta-analysis by Blanchette et al. demonstrated that multidisciplinary care teams including podiatry were associated with a 31% relative risk reduction in any amputation and a 55% relative risk reduction in major amputation.⁷ Similarly, Gibson et al. reported that podiatric care delivered prior to ulcer development was associated with significantly reduced limb loss and fewer hospitalizations among patients with diabetes.⁸ More recently, Luu et al. showed that Medicaid beneficiaries living in US states with podiatric coverage had a 48% lower risk of major amputation compared to those without such access.⁹ Together, these data demonstrate that systematic foot evaluation and early intervention materially improve outcomes.

In patients with peripheral neuropathy, pain may be absent even in the presence of advanced pathology. As a result, reliance on symptoms alone is insufficient. Structured visual inspection and sensory testing become essential tools for identifying pre-ulcerative lesions, structural deformities and perfusion deficits before tissue breakdown occurs. The brevity of the 3-minute Foot Exam is precisely its strength; it lowers the threshold for consistent implementation while preserving diagnostic yield.

In addition, screening is not solely diagnostic; it is educational. When paired with focused counseling, the exam reinforces patient engagement. Teaching patients and families what ‘normal’ looks like, and what it does not, improves vigilance between visits and promotes earlier presentation when changes arise. This shared awareness transforms prevention from a clinician-dependent act into a continuous partnership.

For too long, the field of limb preservation has relied on technological innovations as a means of reversing the rise of non-traumatic amputations. It is time for the focus to shift to the foundational tenets of risk factor identification and management, before defaulting to expensive and often inaccessible new technologies.

Strengthening Multidisciplinary Pathways

Routine use of the 3-Minute Diabetic Foot Exam supports earlier referral and more effective multidisciplinary care. Primary care and community-based clinicians often serve as the first point of contact for people with diabetes. By identifying risk early, providers can initiate timely referral to podiatry, vascular surgery, wound care, endocrinology or specialized limb preservation teams.¹⁻⁵ This approach aligns with contemporary limb salvage models that emphasize coordination across disciplines and care settings. Early detection does not replace advanced therapies; it enables them to be used when they are most effective. The routine performance of a foot examination is just as critical as the new limb-preserving technologies.

A Call To Action

The ALPS 3-Minute Diabetic Foot Exam video represents more than an educational resource; it is a call to normalize routine foot screening for every person living with diabetes. The questionnaire, instructional video, and accompanying clinical materials are [freely accessible through the ALPS website](#), ensuring broad and equitable access. Its simplicity is its strength. Designed for scalability, the exam can be seamlessly integrated into outpatient clinics, hospital systems, community health initiatives and even home-based care environments.

By lowering the barrier to consistent screening, the tool empowers clinicians, caregivers and patients alike, to participate actively in prevention. Limb loss is not an inevitable consequence of diabetes. A structured three-minute commitment to assessment and patient education has the potential to shift care from reactive intervention to proactive preservation, changing trajectories from inevitable amputation to prolonged, functional limb salvage.

Further Information

- ALPS 3-Minute Diabetic Foot Exam: <https://limbpreservationsociety.org/professional-resources/3-minute-diabetic-foot-exam/>
- ALPS 3-Minute Diabetic Foot Exam Form: <https://limbpreservationsociety.org/wp-content/uploads/2026/02/3-min-foot-exam-form.pdf>
- ALPS: <https://limbpreservationsociety.org/>
- DFCon: <https://limbpreservationsociety.org/dfcon/>

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References

1. Ben Zvi L, Maman D, Margulis M, Berkovich Y. Predictors of major amputation and mortality in infected diabetic foot ulcers: a retrospective nationwide inpatient sample study. *Int J Environ Res Public Health*. 2025 Sep 5;22(9):1387.
2. Armstrong DG, Tan TW, Boulton AJM, Bus SA. Diabetic Foot Ulcers: A Review. *JAMA*. 2023 Jul 3;330(1):62-75.
3. Armstrong DG, Boulton AJM, Bus SA. Diabetic Foot Ulcers and Their Recurrence. *N Engl J Med*. 2017 Jun 15;376(24):2367-2375.
4. Miller JD, Carter E, Shih J, Giovinco NA, Boulton AJ, Mills JL, Armstrong DG. How to do a 3-minute diabetic foot exam. *J Fam Pract*. 2014 Nov;63(11):646-56.
5. Boulton AJ, Armstrong DG, Albert SF, Frykberg RG, Hellman R, Kirkman MS, et al.; American Diabetes Association; American Association of Clinical Endocrinologists. Comprehensive foot examination and risk assessment: a report of the task force of the foot care interest group of the American Diabetes Association, with endorsement by the American Association of Clinical Endocrinologists. *Diabetes Care*. 2008 Aug;31(8):1679-85.
6. Mills JL Sr, Conte MS, Armstrong DG, Pomposelli FB, Schanzer A, Sidawy AN, et al.; Society for Vascular Surgery Lower Extremity Guidelines Committee. The Society for Vascular Surgery Lower Extremity Threatened Limb Classification System: risk stratification based on wound, ischemia, and foot infection (WIFI). *J Vasc Surg*. 2014 Jan;59(1):220-34.e1-2.
7. Blanchette V, Brousseau-Foley M, Cloutier L. Effect of contact with podiatry in a team approach context on diabetic foot ulcer and lower extremity amputation: systematic review and meta-analysis. *J Foot Ankle Res*. 2020 Mar 20;13(1):15.
8. Gibson TB, Driver VR, Wrobel JS, Christina JR, Bagalman E, DeFrancis R, et al. Podiatrist care and outcomes for patients with diabetes and foot ulcer. *Int Wound J*. 2014 Dec;11(6):641-8.
9. Luu IY, Hong AT, Lee A, Arias JC, Shih CD, Armstrong DG, et al. Improved diabetic foot ulcer outcomes in medicaid beneficiaries with podiatric care access. *Diabetology (Basel)*. 2024 Oct;5(5):491-500.