Oral Cancer Screening: Why Ongoing Training Matters

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Oral cancer screening is an important part of comprehensive dental care. Head and neck cancers are among the most common cancers worldwide, with more than 792,000 new cases and 424,000 deaths each year. Because more than half of patients are diagnosed with advanced disease, early detection plays a critical role in improving survival.

The clinical oral examination (COE) remains the standard screening method. Evidence shows that screening high-risk individuals, including those who use tobacco and alcohol, can reduce oral cancer mortality. Erythroplakia is especially concerning because of its high malignant potential.

The American Dental Association (ADA) recommends a systematic COE at every patient visit. Any suspicious lesion that persists beyond two to three weeks should be referred for further evaluation and possible biopsy. As health care providers who regularly examine the oral cavity, dental professionals play an essential role in the early detection and prevention of oral cancer.

No major guideline establishes a single, universally required interval for updating oral cancer screening training. However, current evidence supports ongoing, structured continuing education at least every one to two years.

The gap between knowledge and practice

The need for regular training updates is underscored by significant knowledge-practice gaps among dental professionals. A cross-sectional study of 263 dentists found that while 78% acknowledged dentists' role in reducing oral cancer mortality, only 17.5% performed routine oral cancer screenings, and fewer than one-third rated their undergraduate training as sufficient. [1]
A nationwide study in Hungary similarly found that diagnostic self-confidence — more than objective knowledge — was the key determinant of screening behavior, highlighting that training must build both knowledge and confidence. [2]

Recommended training frequency and rationale

- Several U.S. states mandate oral cancer-specific continuing education, or CE. For example, Illinois and New York require oral cancer CE as part of licensure renewal, typically on a two-year cycle. Where mandated, dental professionals should comply with state-specific requirements.

- The ADA's 2026 living guideline on early detection of oral squamous cell carcinoma and oral potentially malignant disorders, or OPMDs, is designed as a "living" guideline **—** meaning it is updated continuously as new evidence emerges — which itself signals the expectation that clinicians stay current with evolving recommendations. The guideline was updated from the 2017 version to reflect new evidence on adjunctive tools and screening practices. [3-5]

- The IARC/WHO has emphasized the importance of well-trained health care workers in performing clinical oral examinations, noting that training quality directly affects screening sensitivity and specificity. [6]

- Screening should be viewed as a continuous process**,** not a one-time event, and the same principle applies to training. [7]

What training should cover

Based on current guidelines and literature, CE in oral cancer screening should address:

- **Systematic clinical oral examination technique** — including extraoral and intraoral inspection and palpation under white light including extraoral and intraoral inspection and palpation under white light [3]

- **Recognition of OPMDs** — leukoplakia, erythroplakia, erythroleukoplakia, oral lichen planus, proliferative verrucous leukoplakia, oral submucous fibrosis and actinic cheilitis [3][8]

- **Risk factor assessment** — tobacco, alcohol and areca nut use and awareness of HPV-related oropharyngeal cancer [1]

- **Referral pathways and biopsy indications** — when and how to refer persistent lesions that last more than two to three weeks [3][9]

- **Updates on adjunctive tools** — current evidence against routine use of toluidine blue, cytology and light-based devices for screening [4-5]

- **Patient communication** — explaining the purpose of COE and educating patients on self-examination and warning signs [3]

Practical recommendation

In the absence of a single guideline-mandated interval, a reasonable evidence-informed approach is:

- **Minimum:** Oral cancer screening CE every two years, which aligns with most state licensure renewal cycles and the pace of guideline updates.
- **Optimal:** Annual training updates, particularly given the ADA's living guideline model and the rapid evolution of evidence on HPV-related cancers, adjunctive technologies and risk stratification.
- **Online learning:** Identified as the preferred format among dental professionals, though hands-on workshops may be more effective for building diagnostic confidence and examination skills. [2]

References

1. Behkar S, Golchini P, Kocamaz ÖF, Altundoğan S. Evaluation of Dentists' Awareness, Knowledge, and Clinical Practices Regarding Early-Stage Oral Cancer Lesions in Türkiye: A Cross-Sectional Study. PLOS One. 2025.

2. Novák P, Szabó RM, Braunitzer G, et al. Diagnostic Confidence and Oral Cancer Screening: Insights From a Nationwide Cross-Sectional Study in Hungary. International Dental Journal. 2025.

3. Urquhart O. Living evidence-informed guideline on the early detection of oral squamous cell carcinoma and potentially malignant disorders. American Dental Association. 2026.

4. Martins-Pfeifer C, Urquhart O, Verdugo-Paiva F, et al. Living Evidence-Informed Guideline on the Early Detection of Oral Squamous Cell Carcinoma and Potentially Malignant Disorders: Vital Staining Adjuncts to Determine the Need for Biopsy, Version 2026 1.0. Journal of the American Dental Association. 2026.

5. Urquhart O, Bhosale AS, Martins-Pfeifer C, et al. Living evidence-informed guideline on the early detection of oral squamous cell carcinoma and potentially malignant disorders: Cytology adjuncts to determine the need for biopsy, Version 2026 1.0. Journal of the American Dental Association. 2026.

6. Bouvard V, Nethan ST, Singh D, et al. IARC Perspective on Oral Cancer Prevention. The New England Journal of Medicine. 2022.

7. Warnakulasuriya S, Kerr AR. Oral Cancer Screening: Past, Present, and Future. Journal of Dental Research. 2021.

8. Carlson ER, Kademani D, Ward BB, Oreadi D. American Association of Oral and Maxillofacial Surgeon's Position Paper on Oral Mucosal Dysplasia. Journal of Oral and Maxillofacial Surgery. 2023.

9. Lingen MW, Abt E, Agrawal N, et al. Evidence-Based Clinical Practice Guideline for the Evaluation of Potentially Malignant Disorders in the Oral Cavity: A Report of the American Dental Association. Journal of the American Dental Association. 2017.