

WHO Monograph on  
**Tobacco cessation  
and oral health  
integration**



**World Health  
Organization**



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# Executive Summary

## **Background**

Oral diseases pose a major health burden for many countries. These diseases share common risk factors of noncommunicable diseases (NCDs): tobacco use, unhealthy diets, physical inactivity and harmful use of alcohol, and can benefit from common responses to NCDs, such as quitting tobacco use.

The guidelines for implementation of Article 14 of the WHO Framework Convention on Tobacco Control (WHO FCTC) recommend integrating brief tobacco interventions into existing health care systems as one of the first steps Parties should take to develop a comprehensive tobacco cessation and treatment system. Although brief tobacco interventions should be integrated into all health care services, oral health programmes could be a priority for integration of brief tobacco interventions in primary care because oral health professionals have the highest access to young and “healthy” smokers, and often have more time with patients than other clinicians to advise smokers to quit. Currently however, it is rare for oral health professionals to routinely discuss tobacco habits with their patients. The main barriers to providing tobacco cessation interventions are lack of knowledge and skills about tobacco and tobacco cessation, lack of professional leadership and lack of integration of tobacco cessation interventions with oral health programmes.

Since 2015, the WHO Tobacco Free Initiative (WHO TFI) and WHO Oral Health Programme have been collaborating to update evidence on tobacco use and oral diseases, as well as the impact of tobacco cessation on oral health, in order to lay a scientific foundation for integrating tobacco cessation interventions into oral health programmes in primary care.

## **Updated evidence on tobacco use and oral diseases**

A systematic review was conducted to quantify: 1) whether there are any causal relationships between tobacco use and oral diseases; 2) what forms of tobacco use are causally associated with oral diseases; and 3) what types of oral diseases are caused by tobacco use. All relevant studies published between 2005 and 2015 that met

inclusion criteria were selected. Following the review stages, 32 studies were included for meta-analysis of association between tobacco use and oral cancer, leukoplakia and periodontal disease, 12 studies were included for meta-analysis of association between exposure to second-hand smoke and dental caries, nine studies were included for meta-analysis of association between tobacco smoking and tooth loss.

The review concluded that:

1. Tobacco use, including tobacco smoking and smokeless tobacco use, increases the risk for oral cancer and leukoplakia by five to six times.
2. Tobacco smoking increases the risk for periodontal disease by two times.
3. Exposure to second-hand smoke has a one-and-a-half to twofold higher risk of causing dental caries for both deciduous and permanent teeth.
4. Tobacco smoking increases the risk of tooth loss by one-and-a-half times.

#### **Updated evidence on the benefits of tobacco cessation on oral health outcomes**

A systematic review was conducted to evaluate whether tobacco cessation improves oral health outcomes. All relevant studies published between 1996 and 2015 that met inclusion criteria were selected. Following the review stages, nine studies were included for meta-analysis of the effects of tobacco cessation on oral health outcomes.

The review concluded that:

1. Tobacco cessation is significantly associated with better oral health outcomes: as measured by the number of lost teeth, periodontal health and the risk of new lesions or malignancies.
2. Tobacco cessation leads to a significant gain in clinical attachment level of 0.28 mm.

#### **Integrating brief tobacco interventions into oral health programme in primary care**

The recognition of associations between tobacco use and oral health, as well as the benefits of tobacco cessation on oral health outcomes makes it imperative for

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