

**About this document:** This is an installment of the Massachusetts State Oral Health Series (MOHS), developed by the Massachusetts Department of Public Health (MDPH). The series focuses on important issues in oral health in the state through topic-specific installments to be released over time. This issue outlines what healthcare providers can do to improve oral health for those with chronic disease. Please visit [www.mass.gov/orgs/office-of-oral-health](http://www.mass.gov/orgs/office-of-oral-health) for more information.

## FOCUS ON ORAL HEALTH

Clinical and community partners who are in contact with individuals who have or are at risk for chronic diseases have a role to play in promoting oral health. *Studies suggest that chronic disease and oral conditions may be biologically linked or can share the same risk factors, which can ultimately impact overall health outcomes.*<sup>1</sup>

## WHAT IS THE CONNECTION between chronic disease and oral conditions?

### Oral Health and Chronic Disease

**Chronic diseases make up the top causes of death and disability in the United States.**<sup>2</sup> These are conditions that persist longer than a few months. Oral health conditions can be both a cause and an effect of certain chronic conditions including:

- **Diabetes:** Periodontal disease and tooth decay can exacerbate diabetes.<sup>3</sup> Diabetes can also cause periodontal disease and tooth decay.<sup>3</sup>
- **Heart disease:** Inflammation caused by heart disease can put individuals at an increased risk of developing periodontal disease and tooth decay.<sup>4</sup>
- **Cancers:** Studies suggest that having periodontal disease and tooth decay may put individuals at risk for cancers including blood and pancreatic cancer, even after controlling for known risk factors.<sup>5</sup>
- **Obesity:** Recent studies suggest that obesity may put individuals at a greater risk for periodontal disease due to increased inflammation.<sup>6</sup>

### Prevention

**Prevention of both chronic disease and oral health conditions is crucial to reducing disease burden.**<sup>1</sup>

Research has shown that incorporating oral health messaging into chronic disease prevention and management programs is successful in improving overall health outcomes.

### A note on shared risk factors

A **shared risk factor** is one where multiple diseases or conditions share underlying risks. Chronic diseases and oral health conditions often co-occur due to these shared risk factors. Outcomes can be improved both for chronic disease and oral health by addressing shared risk factors including **tobacco use, alcohol use, poor nutrition, and obesity.**<sup>8</sup>

Oral health is a part of overall health and chronic diseases often co-occur with oral conditions, so it is important to encourage your patients with chronic diseases to see a dental provider to prevent and treat oral health conditions.

## HOW TO HELP

### For partners working in chronic disease programs



#### Promote

Promote oral health prevention and management by incorporating oral health messaging into related chronic disease programs. When possible, provide opportunities for staff to learn about prevention and treatment of oral conditions.



#### Establish

When possible, help connect patients with or at risk for chronic disease to oral health programs or a dental provider to help establish a dental home.



#### Educate

Provide educational materials and opportunities to patients with or at risk for chronic disease. In addition, educate individuals on shared risk factors including tobacco use, alcohol use, poor nutrition, and obesity.



#### Encourage

Encourage patients to see a dental provider regularly (at least every 6 months) to maintain good oral health, treat any conditions that may arise, and prevent any new conditions from forming. Provide patients with a list of dental providers or resources in their area.

### For partners working in oral health programs



#### Promote

Promote oral health prevention and management, particularly to those who have chronic diseases or are susceptible to chronic diseases. Provide opportunities for staff to learn more about chronic diseases and their relationship to oral health.



#### Educate

Educate patients who have or who are at risk for chronic disease on prevention and treatment of oral conditions. Provide materials for patients to read or point them towards educational opportunities in the community.



#### Treat

Help to identify oral health conditions in those with chronic disease. Treat those who develop oral health conditions and help them establish a dental home. Help connect individuals to dental services in their community.



#### Follow up

Follow up with those who you connect with in your programs around maintaining good oral health. Continue to provide resources and education to those who are interested.

### References

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