

# More than Meets the Eye: Oral Health, Eye Health, and Overall Health

A growing body of evidence shows important connections between oral health and ocular health.

## ● Vision loss is among the top ten disabilities for American adults over 18.<sup>1</sup>



Vision loss encompasses all ocular diseases — such as blindness and visual impairments — that impede the ability to read, drive, and attend to personal affairs. Over the next 30 years, the **increasing prevalence of diabetes and other systemic conditions, combined with an aging population, is projected to double the number of adults** living with visual impairments and age-related eye diseases.<sup>1</sup>

## ● Visual impairments are linked to diminished oral health.<sup>2</sup>

Systemic causes of visual impairment, such as **diabetes and heart diseases**, are established factors that are also associated with **poor oral health outcomes**<sup>3</sup> in addition to compromising overall health. It is estimated that **12 million Americans over age 40 live with some type of visual impairment.**<sup>4</sup>



## ● Studies are uncovering direct links between the health of the eye and the health of the mouth:



- An increased presence of **oral bacteria and a decreased number of natural teeth**<sup>5</sup> have been associated with **increased glaucoma risk.**<sup>6</sup>
- **Periodontal disease** is associated with **increased risk of developing glaucoma.**<sup>7-8</sup>
- Patients with **diabetes** have a **significantly increased risk of developing glaucoma.**<sup>9</sup>
- **Disabled and aging populations** are more predisposed to **oral issues and ocular diseases.**<sup>10</sup>
- **Gum disease** is associated with **raised blood sugar** in people with and without diabetes.<sup>11</sup> Uncontrolled blood sugar contributes to diabetes. Unmanaged diabetes can lead to the development of diabetic retinopathy, a serious condition that causes vision loss in both eyes.<sup>12</sup> **Diabetes is the leading cause of severe visual impairment in working-age Americans.**<sup>13</sup> Moreover, **90% of blindness caused by diabetes is preventable.**<sup>4</sup>

- Knowledge of these links is key for clinicians to diagnose, educate, and treat high-risk individuals.<sup>14</sup>



**Visual impairments have a negative effect on a person's ability to maintain good oral hygiene.** As a result, when providing education on proper oral hygiene practices, clinicians must instruct patients to use their other senses (such as touch).<sup>15</sup> Patients with poor oral health are more likely to be diagnosed with glaucoma.<sup>16</sup> Therefore, **dental providers can serve as a resource to diagnose oral diseases that may be associated with eye problems.** In addition to education, oral care providers can advocate for their patients' overall health by referring patients to eye care providers and forming professional relationships with eye care providers in the community.

- Increased rates of vision loss are a threat to public health as adults with vision loss are more likely to report a diminished quality of life.<sup>17</sup>



**The cost of lost productivity of these adults, combined with the rising direct cost of receiving medical care, is estimated to exceed \$35 billion** unless corrective action is taken.<sup>17</sup> About **93 million adults in the United States are at risk for vision problems.**<sup>4</sup> The COVID-19 pandemic is likely to further drive up this number due to the **significant decrease in the number of eye exams performed as Americans delay care to avoid exposure to the virus.**<sup>18</sup> Furthermore, many U.S. adults have also reported delaying going to the dentist and receiving dental care due to the pandemic.<sup>19</sup>

- It is feasible and necessary to act<sup>17</sup> at the community, state,<sup>20</sup> and federal levels to meet this growing public health need.



Scientific evidence shows that **early detection, screening, and treatment of ocular<sup>21</sup> and oral<sup>22</sup> diseases are key factors to improve the well-being and overall health of Americans.**<sup>23</sup> There needs to be more emphasis on preventive care because while the United States spends more on private health care than any other high-income country, we have worse health outcomes.<sup>24</sup> **Medicare coverage should therefore be expanded to include benefits to enable maintaining good ocular and oral health due to the impacts on overall health<sup>25</sup> and the relationship with quality of life.**<sup>26</sup>

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