

# EYE CARE & SMOKING



## Key Messages for Health Care Providers and Policy Makers

### Overview

Due to an increase in the incidence of age-related macular degeneration (AMD), cataracts and diabetic retinopathy, it is expected that there will be twice the number of blind and visually-impaired people in Canada in 2031, as compared to 2006.<sup>1</sup> Smoking increases the risk of developing these conditions. Encouraging patients to stop smoking can help prevent these diseases.

### The Link between Smoking and Eye Care

- Tobacco use increases the incidence and progression of AMD.<sup>2</sup> This progressive condition can lead to irreversible loss of vision or blindness.<sup>3</sup> People who smoke have up to four times the risk of developing AMD.<sup>4</sup>
- There is an established link between the frequency and intensity of smoking and the incidence and severity of cataract formation.<sup>5,6</sup> People who have smoked in the past and those who currently smoke are at risk for cataracts.<sup>6</sup>
- People who smoke heavily (20 cigarettes a day or more) are at greater risk of developing type 2 diabetes mellitus than people who smoke less, but people who quit smoking have a lower risk than those who currently and actively smoke.<sup>7,8</sup> Diabetic retinopathy is a serious health complication of diabetes that can lead to blindness. More than 60% of patients with type 2 diabetes will experience some form of diabetic retinopathy during the first 20 years of disease.<sup>1</sup>

### Impact

- Vision loss is a growing and serious health issue that has direct and indirect economic costs to Canadians.
- AMD is the leading cause of blindness in Canada. More than 64,000 Canadians are blind as the result of AMD.<sup>1</sup> In 2006, the direct annual health cost of vision loss due to AMD was \$30.5 million.<sup>1</sup>
- The annual direct health cost of vision loss due to cataracts in 2006 was \$513.4 million. Cataract prevalence is expected to rise 90%, between 2006 and 2031.<sup>4</sup>
- Nearly half a million Canadians currently have some form of diabetic retinopathy, a number that is expected to increase by an estimated 61% by 2031.<sup>1</sup>

### Actions

- Vision loss from AMD, cataracts and diabetic retinopathy can be avoided to some degree if patients stop smoking.<sup>1</sup> Up to 20% of vision loss from AMD can be avoided through smoking cessation.<sup>1</sup>
- Both past and current smokers are at risk for cataracts. It is important to encourage early cessation of smoking.<sup>6</sup>
- Former smokers have a lower risk of developing type 2 diabetes mellitus than current, active smokers.<sup>7,8</sup>



## Actions (cont'd)

- The CAN-ADAPTT Guideline Development Group<sup>9</sup> recommends that health care providers should:
  - Ask patients about tobacco use status on a regular basis.
  - Clearly advise patients or clients to quit.
  - Assess the willingness of patients or clients to begin treatment to quit smoking.
  - Offer assistance to every tobacco user who expresses the willingness to begin treatment to quit.
  - Conduct regular follow-up to assess response, provide support and modify treatment as necessary.
  - Refer patients or clients to relevant resources as part of the treatment, where appropriate.

## Helpful Resources

- Canadian Ophthalmological Society <[www.eyesite.ca](http://www.eyesite.ca)>
- Association des médecins ophtalmologistes du Québec <[www.amoq.org](http://www.amoq.org)>
- The Association for Research in Vision and Ophthalmology <[www.arvo.org](http://www.arvo.org)>

## References

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