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. 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. This progressive condition can lead to irreversible loss of vision or blindness. People who smoke have up to four times the risk of developing AMD.
- There is an established link between the frequency and intensity of smoking and the incidence and severity of cataract formation. People who have smoked in the past and those who currently smoke are at risk for cataracts.
- 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. Diabetes 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.

**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. In 2006, the direct annual health cost of vision loss due to AMD was $30.5 million.
- 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.
- 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.

**Actions**

- Vision loss from AMD, cataracts and diabetic retinopathy can be avoided to some degree if patients stop smoking. Up to 20% of vision loss from AMD can be avoided through smoking cessation.
- Both past and current smokers are at risk for cataracts. It is important to encourage early cessation of smoking.
- Former smokers have a lower risk of developing type 2 diabetes mellitus than current, active smokers.
Actions (cont’d)

- The CAN-ADAPTT Guideline Development Group 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>
- Association des médecins ophtalmologistes du Québec <www.amoq.org>
- The Association for Research in Vision and Ophthalmology <www.arvo.org>

References