

1 Introduction

This literature review has been prepared for the National Health and Medical Research Council (NHMRC) by Biotext Pty Ltd. The aim is to identify risk factors for eye disease and injury and the measures that the general public can take to prevent or reduce the risk of eye disease and injury. The review was commissioned in January 2007 and completed in July 2007. The research team undertaking the review is listed in Appendix 1.

1.1 Scope of the literature review

In commissioning this literature review, the NHMRC specified the following tasks:

- systematically review the Australian and international literature between 1996 and 2006, encompassing a broad range of relevant disciplines, including medicine, psychology, sociology and health promotion
- examine the evidence relating to the validity of risk or causal factors for eye disease and injury, such as tobacco, alcohol, nutrition, infections, age or ageing, ultraviolet (UV) damage, injury and medication side effects
- consider the evidence to support (or otherwise) regular eye tests and the optimal recommended frequency of regular eye tests for different age groups, and the specific needs of at-risk groups in Australia, namely:
 - Aboriginal and Torres Strait Islander people
 - older people
 - people with diabetes
 - people with a family history of eye disease
- include levels and grades of evidence as set out in *A Guide to the Development, Evaluation and Implementation of Clinical Practice Guidelines* (NHMRC 1999) and additional levels of evidence and grades for recommendations for external developers of guidelines (NHMRC 2007)
- ensure that the systematic review of the literature conforms to the NHMRC standards as outlined in the NHMRC publications *How to Review the Evidence: Systematic Identification and Review of Scientific Literature* (1999) and *How to Use the Evidence: Assessment and Application of Scientific Evidence* (2000).

The methods used to achieve these tasks are described in Chapter 3; the search strategy is given in Appendix 2.

1.2 Organisation of this review

The review contains six chapters:

- *Chapter 1* introduces the scope of the review and its structure
- *Chapter 2* provides background information on the main eye health problems in the Australian population

- *Chapter 3* summarises the methods used
- *Chapter 4* provides a tabulated summary of the literature review findings on risk factors for eye disease and injury
- *Chapter 5* provides a text description of the overall results for each of the major risk factors
- *Chapter 6* discusses areas that require further research.

Seven appendixes provide details of the review team, the search strategy, the search strings used and the number of papers retrieved, the results for each combination of conditions and risk factors, the quality of the systematic reviews, and references excluded from and included in the systematic review.