Table 1: Specific interventions to prevent cortical vision impairment.

Type of prevention	Specific interventions
Primary prevention	Optimal access to, and provision of, antenatal care to prevent premature birth.
	Optimal access to, and provision of, obstetric and perinatal care to prevent perinatal hypoxic brain injury.
	Optimal access to, and provision of, postnatal care.
	Interventions to reduce maternal alcohol and other drug use (e.g., opioids, methamphetamine).
	Interventions to reduce sexually transmitted infections (e.g., to prevent congenital syphilis and congenital herpes simplex virus infection).
	Interventions to reduce intentional and non-intentional injuries in pregnancy (e.g., family violence preventive interventions; seat belt use and other road safety interventions).
Secondary prevention*	Screening for maternal alcohol/drug use and then appropriate provision of treatment services.
	Screening for family violence or other exposure to intentional injuries during pregnancy.
Tertiary prevention**	Access to assessment for early diagnosis and intervention to optimise visual function (e.g., management of associated refractive errors, strabismus and amblyopia).
	Referral to the Blind and Low Vision Education Network New Zealand to reduce the impact of disability.

*Secondary prevention involves detecting disease at an early stage and intervening to halt or slow its progression.
**Tertiary prevention involves reducing the impact of an already established disease by preventing complications and improving quality of life.

Table 2: Specific interventions to prevent retinopathy of prematurity.

Type of prevention	Specific interventions
Primary prevention	Optimal access to, and provision of, antenatal care to prevent premature births.
	Administration of steroids to women with impending premature delivery.[9]
	Minimisation of mechanical ventilation when not absolutely indicated.[9]
	Minimisation of oxygen saturation fluctuations.[9]
	Minimisation of blood transfusions when not absolutely indicated.[9]
	Optimal access to, and provision of, neonatal and postnatal care: specifically, adequate nutrition and use of human milk where possible to encourage good postnatal growth.[9]
Secondary prevention	Ensure ophthalmic screening of all infants ≤1,250g at birth and/or born at <30 weeks gestation to detect treatable disease.
	Early treatment with anti–vascular endothelial growth factor (VEGF) injections and laser if required.
Tertiary prevention	Referral to Blind and Low Vision Education Network New Zealand to reduce the impact of disability.
	Access to ophthalmic care to manage associated refractive errors, strabismus and amblyopia, which can worsen visual function.

Table 3: Specific interventions to prevent optic nerve hypoplasia.

Type of prevention	Specific interventions
Primary prevention	Interventions to reduce maternal smoking, alcohol and other drug use (e.g., opioids, methamphetamine).
	Appropriate sexuality education in schools to reduce the incidence of teenage pregnancies.
	Optimal access to, and provision of, family planning/sexual health services to reduce the incidence of teenage pregnancies.
	Optimal access to, and provision of, antenatal care.
Secondary prevention	Screening for maternal smoking/alcohol/drug use and then appropriate provision of treatment services.
Tertiary prevention	Referral to Blind and Low Vision Education Network New Zealand to reduce the impact of disability.
	Access to ophthalmic care to manage associated refractive errors, strabismus and amblyopia, which can worsen visual function.

Table 4: Specific interventions to prevent refractive error.

Type of prevention	Specific interventions
Primary prevention	Public awareness campaigns targeted at parents of young children. Ministry of Education policy changes about outdoor time at schools and minimising near activities (or following the 20/20/20 rule) for children. Such outdoor time of course requires appropriate sun protection (shade cover, hats and sunblock etc) for some of the year.
Secondary prevention	Screening: Add an autorefractor to the Year 7 (age 11–12) vision and hearing technician school vision check to detect and refer early myopia to appropriate clinics.
	Screening and early optometry care: Provide broader public funding to improve access to glasses and optometry care (especially for more deprived communities).
	Family history of refractive error is to be actively sought by general practitioners, paediatricians, midwives and Plunket nurses.
	Provision of funding by Pharmac for appropriate provision of atropine eyedrops, which are proven to slow myopia progression.[16]
	Support the New Zealand Association of Optometrist's recommendation for enabling funding of MiYOSMART and Stellest myopia-prevention spectacles.[2]
	Establish publicly funded optometry care (for example, at public hospitals or via funding contracts for community optometrists) to actively manage children with progressive myopia.
Tertiary prevention	Referral to Blind and Low Vision Education Network New Zealand to reduce the impact of disability.

Table 5: Specific interventions to prevent amblyopia.

Type of prevention	Specific interventions
Secondary prevention	Screening: Increase the uptake of vision screening at the B4 School Check.[19]
	Further optimise the screening protocol to only detect amblyopia of 6/15 or worse.
	Use an autorefractor in the screening process to better detect amblyogenic factors and bilateral amblyopia.
	Early treatment of amblyopia with patching, optical penalisation and/or atropine eye drops.
	Prompt management of amblyogenic risk factors including strabismus surgery and refractive error within the amblyogenic time frame.
	Improve public funding of patches and spectacles to improve access, especially in deprived populations.
Tertiary prevention	Referral to Blind and Low Vision Education Network New Zealand to reduce the impact of disability.

Table 6: Specific interventions to prevent keratoconus.

Type of prevention	Specific interventions
Primary prevention	Consideration of educational campaigns targeted at parents and teachers around children minimising eye rubbing and having any allergic eye disease appropriately managed (including lifestyle measures and the use of olopatadine eye drops).
Secondary prevention	Screening: Add an autorefractor and corneal topography to the Year 7 (age 11–12) vision and hearing technician school vision check to detect and refer early keratoconus.
	Public funding to improve access to optometry assessment for those identified as at risk for keratoconus by parents, school teachers or general practitioners, especially those in deprived communities.
	Improve access to prompt tomography diagnosis and corneal cross-linking.
Tertiary prevention	Referral to Blind and Low Vision Education Network New Zealand to reduce the impact of disability.
	Use of the Aotearoa Research Into Keratoconus registry to ensure high-quality management of cases.
	Increase awareness among health workers of corneal donor (tissue donors) impact and need.

Table 7: Specific interventions to prevent genetic eye diseases.

Type of prevention	Specific interventions
Primary prevention	Genetic counselling for affected individuals to inform their decisions about future pregnancies.
	Education on consanguinity.
	Access to in vitro fertilisation and pre-implantation screening.
	Germline therapy.
Secondary prevention	Prenatal diagnosis, allowing counselling and consideration of termination of pregnancy.
	Early diagnosis with routine red reflex assessments at birth and 6 weeks.[29]
	Early treatment of affected infants/children.
Tertiary prevention	Referral to Blind and Low Vision Education Network New Zealand to reduce the impact of disability.
	Inform parents of available national and international support groups.
	Patient enrolment to the New Zealand national Database of Inherited Retinal and Optic Nerve Disease, which can offer the option to participate in genetic studies and therapies.[30]

Table 8: Specific interventions to prevent infectious eye diseases.

Type of prevention	Specific interventions
Primary prevention	Promote and provide ready access to vaccination to increase coverage levels of all childhood vaccines. Elimination of some of these diseases is feasible (e.g., measles, mumps, rubella and *H. influenzae* type b).
	Prompt and effective control of outbreaks (e.g., measles, meningococcal disease outbreaks) if these arise.
Secondary prevention	Prompt identification and treatment of cases may reduce the risk of sequelae (e.g., early antibiotic treatment for meningococcal disease).
Tertiary prevention	Referral to Blind and Low Vision Education Network New Zealand to reduce the impact of disability.

Table 9: Specific interventions to prevent eye trauma.

Type of prevention	Specific interventions
Primary prevention	Mass media campaigns (e.g., funded by Accident Compensation Corporation [ACC]) to promote avoidance of hazardous situations for eye injury and to promote increased use of protective eyewear.
	Legislation to prevent the sale of high-risk toys, lasers and fireworks.
	Legislation to require eye protection use during specific sporting activities such as cycling, football and ball sports.
	Public funding of protective eyewear (e.g., from ACC).
Secondary prevention	Prompt and effective treatment to maximise recovery and minimise the risk of sequelae.
Tertiary prevention	Referral to Blind and Low Vision Education Network New Zealand to reduce the impact of any disability.