INJURIES ARISING FROM THE ASSAULT, NEGLECT, OR MALTREATMENT OF CHILDREN

Introduction

Child maltreatment has been defined as any act of commission or omission by a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child. Child abuse (acts of commission) includes physical, sexual and emotional abuse, and fabricated or induced illness. Child neglect (acts of omission) includes failure to: provide for a child's physical and emotional needs; obtain necessary medical or dental care; ensure a child has access to education; provide adequate supervision, and prevent exposure to violent environments [383]. Child abuse and neglect have both short term and lifelong physical, psychological, and behavioural consequences for individuals and consequences for society. Survivors of childhood sexual abuse are at risk for a wide range of medical, psychological, behavioural, and sexual disorders [384]. Studies on child abuse or neglect and subsequent mental and physical health outcomes suggest a causal relationship between non-sexual child maltreatment and a range of mental disorders, suicide attempts, drug use, and risky sexual behaviour [385].

Most child maltreatment is perpetrated by parents or guardians, many of whom were themselves maltreated as children [385,386]. Poverty, sole parenthood, the presence of a non-biological parent in the household, mental health problems, domestic violence, and alcohol and drug abuse increase the probability of abusive parenting [385,386]. Characteristics that make a child more difficult to care for than usual, for example crying a lot, having a "difficult temperament", or being disabled, may increase a child's risk of being maltreated, especially where there are other demographic or family risk factors [387].

A UNICEF report on child maltreatment deaths from 1994 to 1998 ranked New Zealand near the bottom in the OECD [388] with a rate of 1.2 deaths per 100,000 children under 15 years, double the OECD median. Over the period 2002–2012 New Zealand's rates of child death due to assault have not improved [380].

The following section reviews hospital admissions and mortality from injuries arising from the assault, neglect, or maltreatment of children aged 0–14 years using information from the National Minimum Dataset and the National Mortality Collection.

Data Source and Methods

Indicator

1. *Hospital admissions for injuries arising from the assault, neglect, or maltreatment of children 0–14 years*
2. *Deaths from injuries arising from the assault, neglect, or maltreatment of children 0–14 years*

Data Source

1. Hospital admissions

Numerator: National Minimum Dataset: Hospital admissions for children (0–14 years) with a primary diagnosis of injury (ICD-10-AM S00–T79) and an external cause code of intentional injury (ICD-10-AM X85–Y09) in any of the first 10 external cause codes. As outlined in **Appendix 3** in order to ensure comparability over time, all cases with an emergency department specialty code (M05–M08) on discharge were excluded, as were admissions with a primary diagnosis outside of the ICD-10-AM S00–T79 injury range.

Denominator: NZ Statistics NZ Estimated Resident Population

2. Mortality

Numerator: National Mortality Collection: Deaths in children (0–14 years) with a clinical code (cause of death) of intentional injury (ICD-10-AM X85–Y09).

Denominator: NZ Statistics NZ Estimated Resident Population

Notes on Interpretation

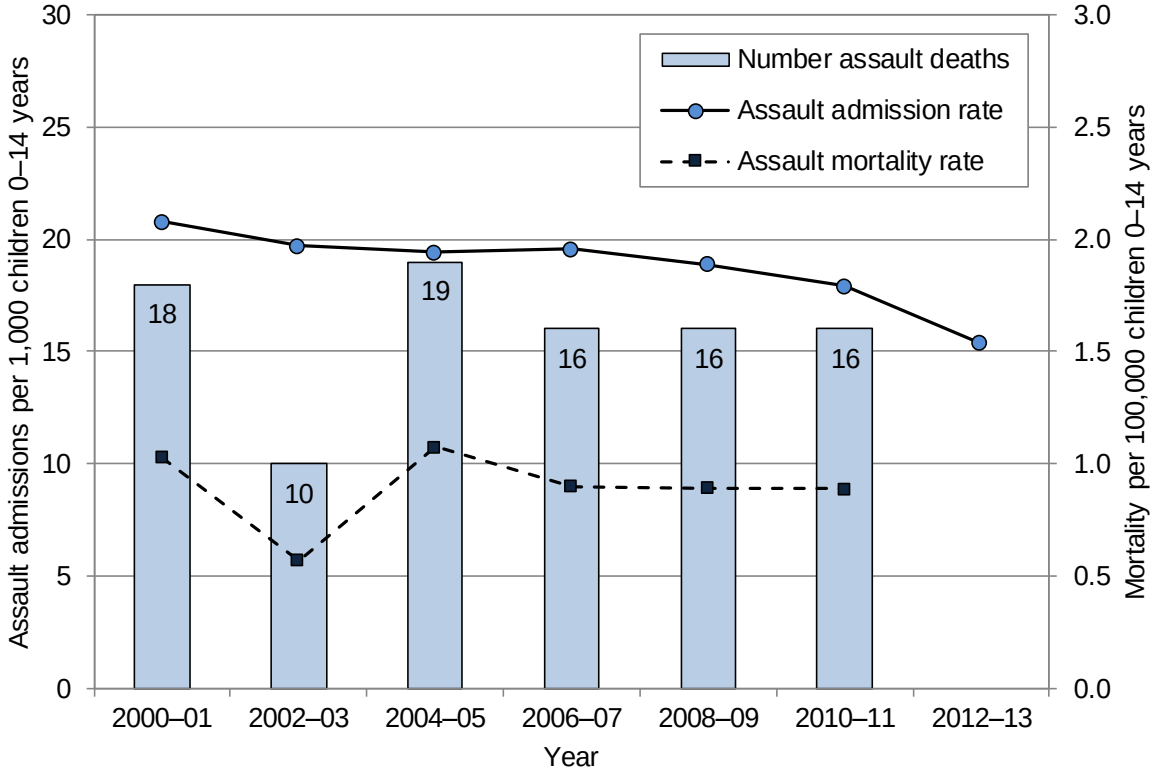
The limitations of the National Minimum Dataset are discussed at length in **Appendix 3**. The reader is urged to review this Appendix before interpreting any trends based on hospital admission data.

New Zealand Distribution and Trends

New Zealand Trends

In New Zealand during 2000–2013, hospital admissions for injuries arising from the assault, neglect, or maltreatment of children declined gradually, while mortality during 2000–2011 remained relatively static. On average during 2000–2011, approximately 8 children per year died as a result of injuries arising from assault, neglect, or maltreatment (**Figure 1**).

Figure 1. Hospital admissions (2000–2013) and deaths (2000–2011) due to injuries arising from the assault, neglect, or maltreatment of New Zealand children aged 0–14 years



Source: Numerator: *Admissions*: National Minimum Dataset (emergency department cases excluded); *Mortality*: National Mortality Collection; Denominator: Statistics NZ Estimated Resident Population; Note: numbers of deaths are per two year period

Distribution by Age and Gender

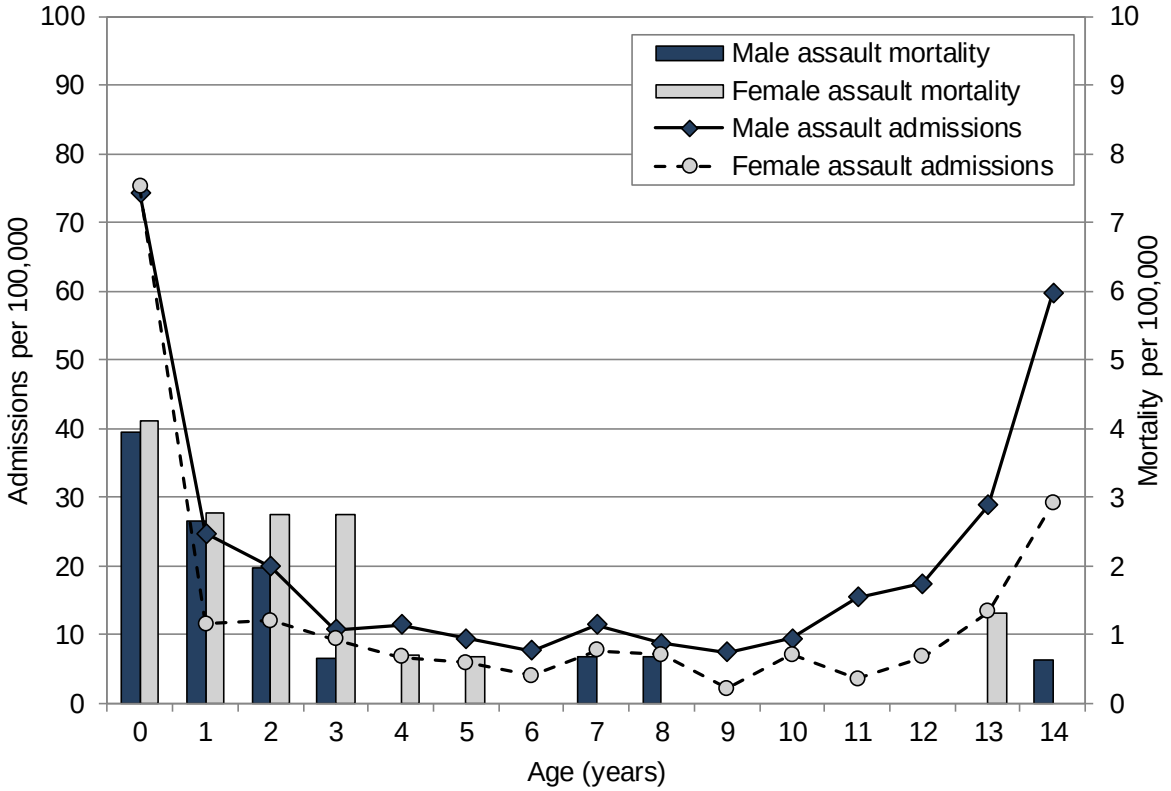
In New Zealand during 2009–2013, hospital admissions for injuries arising from the assault, neglect, or maltreatment of children exhibited a U-shaped distribution with age, such that rates were higher for infants aged less than one year and for those over eleven years of age. In contrast, mortality was highest for infants less than one year, followed by those aged one and two years (**Figure 2**).

The gender balance for admissions was relatively even during infancy and early childhood, however, admissions for males became more predominant as adolescence approached (**Figure 2**).

Trends by Ethnicity

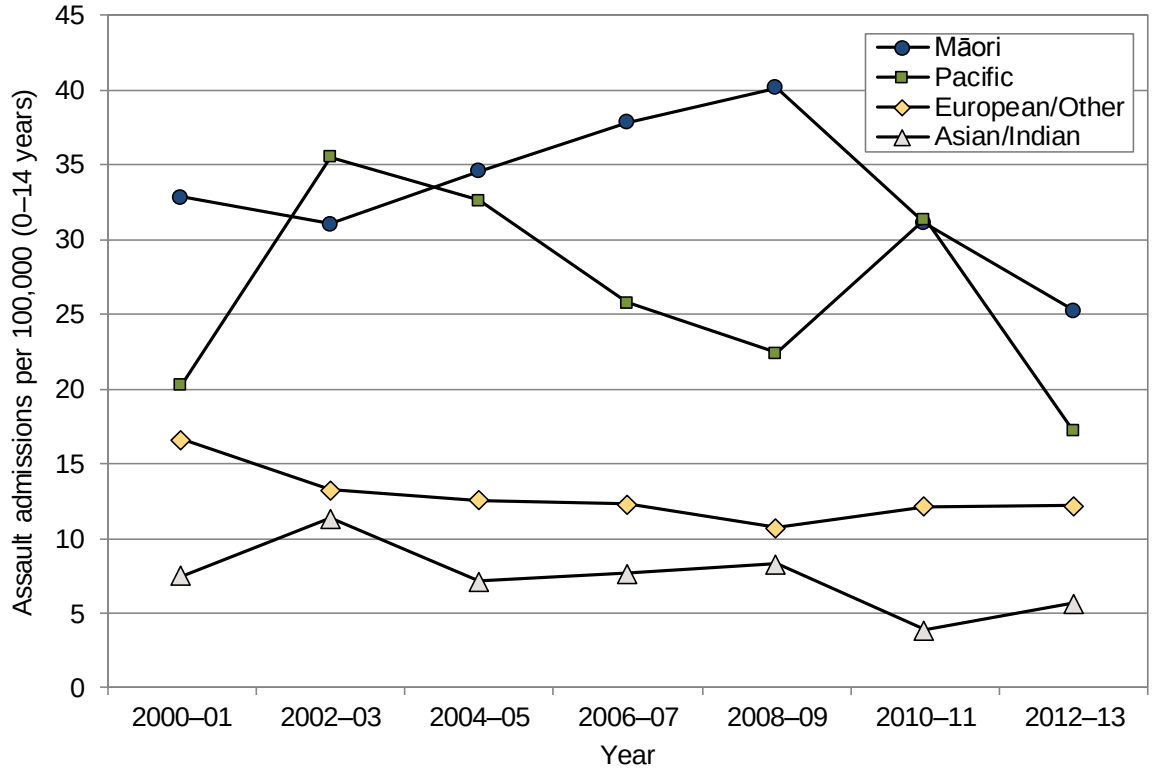
In New Zealand during 2000–2013, hospital admissions for injuries arising from assault, neglect, or maltreatment were consistently higher for Māori and Pacific children than for European/Other and Asian/Indian children. While rates for European/Other children declined during this period, rates for Māori children increased during the early-to-mid 2000s, but declined during 2010–2013. In contrast, admissions for Pacific children also declined during the early-to-mid 2000s, but increased in 2010–2011 before declining again in 2012–2013 (**Figure 3**).

Figure 2. Hospital admissions (2009–2013) and deaths (2007–2011) due to injuries arising from the assault, neglect, or maltreatment of New Zealand children by age and gender



Source: Numerator: *Admissions*: National Minimum Dataset (emergency department cases excluded); *Mortality*: National Mortality Collection; Denominator: Statistics NZ Estimated Resident Population

Figure 3. Hospital admissions for injuries arising from the assault, neglect, or maltreatment of children aged 0–14 years by ethnicity, New Zealand 2000–2013



Source: Numerator: National Minimum Dataset (emergency department cases excluded); Denominator: Statistics NZ Estimated Resident Population; Note: Ethnicity is level 1 prioritised

Distribution by NZDep Index Decile, Ethnicity and Gender

In New Zealand during 2009–2013, hospital admissions for injuries arising from the assault, neglect, or maltreatment of children were *significantly higher* for males and for those from average to more deprived areas (NZDep deciles 3–10). Admissions were also *significantly higher* for Māori and Pacific children than for European/Other children, and *significantly lower* for Asian/Indian children (**Table 1**).

Table 1. Hospital admissions for injuries arising from the assault, neglect, or maltreatment of children aged 0–14 years by NZDep Index decile, ethnicity and gender, New Zealand 2009–2013

Assault, neglect, or maltreatment admissions							
Children 0–14 years							
Variable	Rate	Rate ratio	95% CI	Variable	Rate	Rate ratio	95% CI
NZ Deprivation Index decile				Prioritised ethnicity			
Deciles 1–2	4.41	1.00		Māori	31.24	2.60	2.23–3.03
Deciles 3–4	8.97	2.04	1.37–3.02	Pacific	23.39	1.95	1.55–2.44
Deciles 5–6	15.48	3.51	2.45–5.04	Asian/Indian	6.51	0.54	0.37–0.79
Deciles 7–8	21.89	4.97	3.52–7.02	European/Other	12.01	1.00	
Deciles 9–10	31.52	7.16	5.12–10.01				
Gender							
Female	13.45	1.00		Male	21.18	1.57	1.36–1.82

Source: Numerator: National Minimum Dataset (emergency department cases excluded); Denominator: Statistics NZ Estimated Resident Population; Note: Rate is per 100,000; Rate ratios are unadjusted; Ethnicity is level 1 prioritised; Decile is NZDep06

Nature of the Injury Sustained

During 2009–2013, the head was the most common site for injuries sustained as the result of the assault or neglect. For those aged 0–4 years, 59.3% of their injuries were to the head with the largest proportion being traumatic subdural haemorrhages and superficial head injuries. For children aged 5–9 years, 39.3% of their injuries were to the head, and were more commonly superficial. The next most common site was the abdominal/lower back/spine/pelvis area followed by the upper limb. For children aged 10–14 years, 55.5% of injuries were to the head, the most common being fractures of the skull or facial bones. The next most common site of injury for this age group was the upper limb (**Table 2**).

Table 2. Nature of injuries arising from assault, neglect, or maltreatment in hospitalised children 0–14 years by age group, New Zealand 2009–2013

Primary diagnosis	Number: total 2009–2013	Number: annual average	Rate per 100,000	Percent
Assault, neglect, or maltreatment				
Children aged 0–4 years				
Traumatic subdural haemorrhage	88	17.6	5.78	22.7
Superficial head injury	76	15.2	4.99	19.6
Fracture skull or facial bones	16	3.2	1.05	4.1
Other head injuries	50	10.0	3.28	12.9
Injuries to thorax (including rib fractures)	5	1.0	0.33	1.3
Injuries to abdomen, lower back, and pelvis	26	5.2	1.71	6.7
Injuries to upper limb	30	6.0	1.97	7.8
Fractured femur	16	3.2	1.05	4.1
Other injuries to lower limb	8	1.6	0.53	2.1
Maltreatment	42	8.4	2.76	10.9
Other injuries	30	6.0	1.97	7.8
Total	387	77.4	25.42	100.0
Children aged 5–9 years				
Superficial head injury	20	4.0	1.34	18.7
Fracture skull or facial bones	3	0.6	0.20	2.8
Concussion	3	0.6	0.20	2.8
Other head injuries	16	3.2	1.07	15.0
Injuries to abdomen, lower back, and pelvis	20	4.0	1.34	18.7
Injuries to upper limb	14	2.8	0.94	13.1
Other injuries to lower limb	6	1.2	0.40	5.6
Maltreatment	8	1.6	0.54	7.5
Other injuries	17	3.4	1.14	15.9
Total	107	21.4	7.19	100.0
Children aged 10–14 years				
Fracture skull or facial bones	61	12.2	4.06	20.9
Concussion	37	7.4	2.46	12.7
Superficial head injury	24	4.8	1.60	8.2
Other head injuries	40	8.0	2.66	13.7
Injuries to thorax (including rib fractures)	10	2.0	0.67	3.4
Injuries to abdomen, lower back, and pelvis	22	4.4	1.46	7.5
Injuries to upper limb	48	9.6	3.19	16.4
Fractured femur	3	0.6	0.20	1.0
Other injuries to lower limb	12	2.4	0.80	4.1
Maltreatment	11	2.2	0.73	3.8
Other injuries	24	4.8	1.60	8.2
Total	292	58.4	19.42	100.0

Source: National Minimum Dataset (Emergency Department cases excluded)

South Island DHBs Distribution and Trends

South Island DHBs vs. New Zealand

In Canterbury during 2009–2013, hospital admissions for injuries arising from the assault, neglect, or maltreatment of children were *significantly higher* than the New Zealand rate, while in the West Coast rates were *significantly lower*. Rates in the remaining South Island DHBs were not significantly different from the New Zealand rate (**Table 3**).

Table 3. Hospital admissions for injuries arising from the assault, neglect, or maltreatment of children aged 0–14 years, South Island DHBs vs. New Zealand 2009–2013

DHB	Number: total 2009–2013	Number: annual average	Rate per 100,000	Rate ratio	95% CI
Children 0–14 years					
Assault, neglect or maltreatment injuries					
Nelson Marlborough	20	4.0	14.96	0.86	0.55–1.34
South Canterbury	5	1.0	9.45	0.54	0.23–1.31
Canterbury	160	32.0	33.85	1.94	1.64–2.30
West Coast	5	1.0	15.76	0.91	0.38–2.18
Southern	49	9.8	17.56	1.01	0.76–1.35
New Zealand	786	157.2	17.41	1.00	

Source: Numerator: National Minimum Dataset (Emergency Department cases excluded); Denominator: Statistics NZ Estimated Resident Population

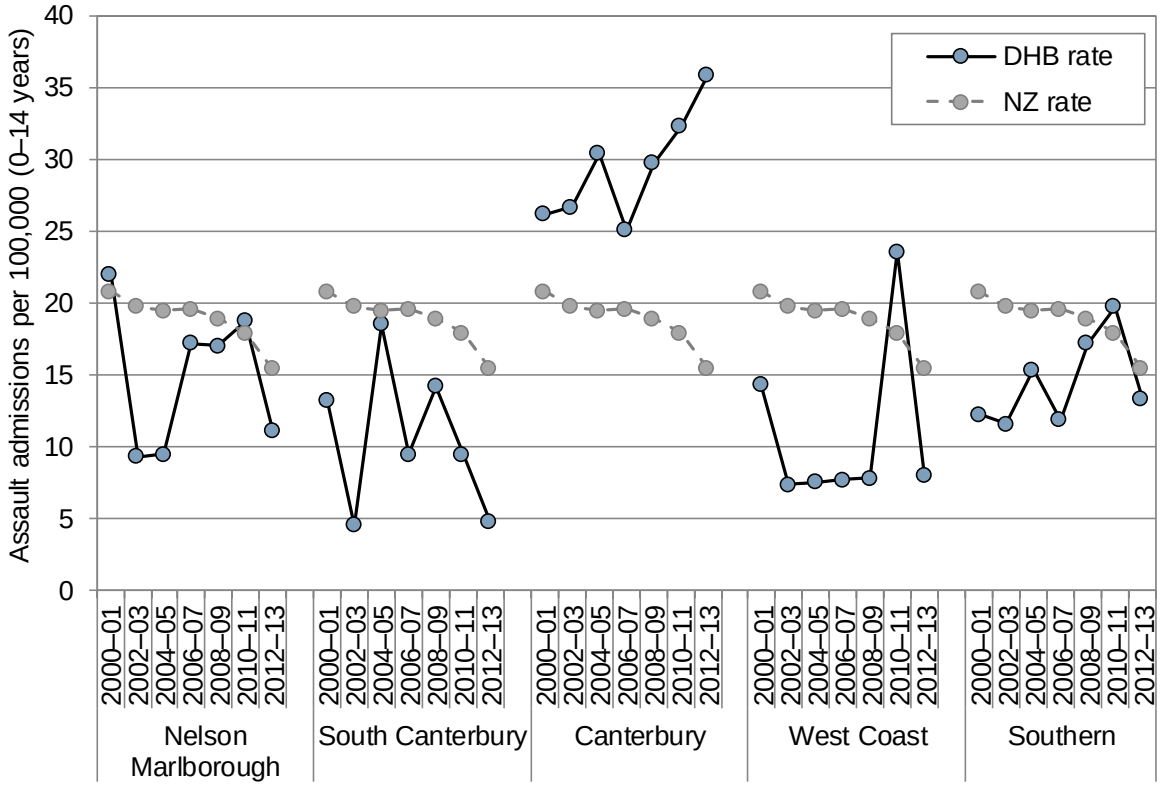
South Island DHBs Trends

In the South Island DHBs during 2000–2013, there was considerable year to year variation in hospital admissions for injuries arising from the assault, neglect, or maltreatment of children, making precise interpretation of trends difficult. However, rates in Canterbury were generally higher than the New Zealand rate, while rates were generally lower in the remaining South Island DHBs (**Figure 4**).

South Island DHBs Mortality

During 2000–2011, 8 Nelson Marlborough, 4 Canterbury, and 5 Southern children died as the result of injuries arising from assault, neglect, or maltreatment.

Figure 4. Hospital admissions for injuries arising from the assault, neglect, or maltreatment of children aged 0–14 years, South Island DHBs vs. New Zealand 2000–2013



Source: Numerator: National Minimum Dataset (Emergency Department cases excluded); Denominator: Statistics NZ Estimated Resident Population

Local Policy Documents and Evidence-based Reviews Relevant to the Prevention of Child Maltreatment

In New Zealand there are a range of publications that focus on child maltreatment and family violence. A large number of international reviews have also explored these issues. Table 4 (below) summarises publications that focus primarily on child maltreatment, while the chapter on family violence includes reviews of publications that consider family violence more broadly.

Table 4. Local policy documents and evidence-based reviews relevant to the prevention of child maltreatment

Ministry of Health publications
Ministry of Health. 2002. **Family violence intervention guidelines child and partner abuse**. Wellington: Ministry of Health. http://www.health.govt.nz/publication/family-violence-intervention-guidelines-child-and-partner-abuse These guidelines are aimed at all health care professionals and provide a framework for safe and effective interventions to assist victims of violence and abuse. The report identifies health care providers as being in an ideal position to assist in the early identification of family violence because they come into contact with the majority of children. Guidance on identification, assessment and response to suspected child abuse is provided.
Ministry of Health. 2001. **Suspected child abuse and neglect: Recommended referral process for General Practitioners**. Wellington: Ministry of Health. http://www.health.govt.nz/publication/recommended-referral-process-general-practitioners-suspected-child-abuse-and-neglect This document, developed by the Ministry of Health, and Child Youth and Family, with significant input from the Royal New Zealand College of General Practitioners, provides a set of guiding principles and key points for general practitioners in assessing suspected child abuse. A table and flowchart summarising the process for recognising child abuse and neglect are provided. A set of appendices include body diagram sheets, a referral facsimile, Child, Youth and Family referral procedures, recommended procedures for general practices and relevant legal issues.
Ministry of Education publications
Ministry of Education. 2009. **Reporting of suspected or actual child abuse and neglect: Protocol between the Ministry of Education, the New Zealand Schools Trustees Association and Child, Youth and Family 2009** Wellington: Ministry of Education. http://www.minedu.govt.nz/~/media/MinEdu/Files/EducationSectors/SpecialEducation/PublicationsResources/ReportingAbuseProtocolAug09.pdf This protocol is intended to assist boards of trustees, principals and school staff in dealing with child abuse and neglect, and the management of child abuse allegations against board employees.
Ministry of Social Development publications
Child, Youth and Family. 2011. **Working together to keep children and young people safe**. Wellington: Ministry of Social Development. http://www.cyf.govt.nz/documents/about-us/publications/27713-working-together-3-0-45ppi.pdf This guide is for people in social service agencies, schools, healthcare organisations, community and other groups who have close contact with children and families. It covers looking out for vulnerable families, recognising child abuse, what to do if you have concerns about a child, offering help to families, and the role of Child Youth and Family.
Ministry of Social Development. 2010. **Recognising and responding to child neglect in New Zealand**. Wellington: Ministry of Social Development. http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/recognising-child-neglect/child-neglect-report-final.pdf This report presents the findings from two research projects commissioned to inform policy on child maltreatment. The research addressed the neglect of children from birth to five years and it involved a literature review and key informant interviews with 22 workers from the health, social services and education sectors. Part A of the report summarises the findings from the interviews and part B summarises the literature review findings. The findings cover: definitions of child neglect; factors associated with child neglect; prevalence and incidence of child neglect; recognising child neglect and its impacts; prevention and intervention responses; difficulties when responding to neglect; what is working well, and how we could better prevent and respond to child neglect in New Zealand.
Centre for Social research and Evaluation. 2008. **Preventing physical and psychological maltreatment of children in families**. Wellington: Ministry of Social Development. http://www.msd.govt.nz/about-msd-and-our-work/publications-resources/literature-reviews/preventing-maltreatment/index.html This report presents a summary of the findings of a literature review of New Zealand and international research about the physical and psychological abuse of children and the prevention of child maltreatment. The review was undertaken to provide an evidence base for the development of the Campaign for Action on Family Violence, and public and community education programmes. It aimed to determine: the nature and consequences of child maltreatment; the predisposing, precipitating and perpetuating factors; the factors that contribute to primary prevention, and to effective and safe parenting; and what motivates adults (both family and non-family) to intervene when they suspect a child is being abused. The findings from the review indicated that child maltreatment has harmful and long-lasting consequences, and is more prevalent in deprived families and communities. Predisposing factors for becoming an abusive parent include genetic characteristics and having grown up in a violent or abusive environment. Perpetuating factors included the wider social context, the family context, and the characteristics and behavioural patterns of the parent or caregiver and the child. Precipitating factors are those that directly trigger and abusive episode, for example incessant crying, soiling, aggressive behaviour, or a crisis event for a parent. Parent education programmes may be more effective if they: are provided separately to men and women by workers of the same ethnicity as the parents, are based on a combination of changing attitudes and increasing knowledge and child management skills, and are optimistic and non-judgemental. Increasing awareness of the extended family and the public is likely to be more effective than interventions aimed at the parents for dealing with severe baby and child battering. To increase the chances of witnesses and bystanders intervening it is necessary to promote awareness and understanding of the issue,

provide access to help, support and advice, give practical tips, and provide information on all the options.

Other government publications

Bennett P. 2012. **The White Paper for Vulnerable Children. Volume I**. Wellington: New Zealand Government.

Bennett P. 2012. **The White Paper for Vulnerable Children. Volume II**. Wellington: New Zealand Government. http://www.childrensactionplan.govt.nz/action-plan/white-paper/

New Zealand Government. 2012. **Children's Action Plan: Identifying, supporting and protecting vulnerable children**. Wellington: New Zealand Government.

http://www.msd.govt.nz/documents/about-msd-and-our-work/work-programmes/policy-development/white-paper-vulnerable-children/white-paper-for-vulnerable-children-childrens-action-plan-summaries.pdf

The White Paper on Vulnerable children sets out the Government's programme for addressing child maltreatment by identifying the most vulnerable children and targeting services to them. Volume I sets out the actions the Government will take to improve outcomes for the most at-risk children and Volume II contains the evidence and detailed policy rationale for each of the proposals. The White Paper outlines a set of reforms that aim to: help ensure that parents, caregivers, family/whānau, and communities understand and fulfil their responsibilities towards children; give professionals new tools to identify vulnerable children and act earlier; build a new community-based approach to meeting the needs of children at risk of maltreatment as early as possible; reinforce joint responsibility and action across government to improve outcomes for children within target populations, develop a new direction for the way that Child, Youth and Family, justice, health, education and welfare agencies, professionals and other organisations work together, and an information platform through which they can record and share information; develop a new cross-agency Strategy for Children and Young People in Care; build a children's workforce that is responsive to the needs of vulnerable children; and introduce a range of new measures to manage adults at high risk of abusing children. The Action Plan sets out a three-year plan for achieving the changes outlined in the White Paper. The Children's Action Plan has its own website: http://childrensactionplan.govt.nz/ which is updated regularly.

International guidelines

National Collaborating Centre for Women's and Children's Health, National Institute for Health and Clinical Excellence. 2009. **When to suspect child maltreatment**. London: RCOG Press. https://www.nice.org.uk/guidance/cg89/resources/guidance-when-to-suspect-child-maltreatment-pdf

The purpose of this guideline is to provide healthcare professionals with a summary of the clinical features associated with child maltreatment that may be observed when a child presents for care. It is intended to raise awareness in health professionals who are not specialists in child protection, not to provide recommendations on how to diagnose, confirm or disprove child maltreatment. It covers the alerting features in children and young people (under the age of 18) of physical, sexual and emotional abuse, neglect, and fabricated or induced illness.

The full guideline, which contains more details on the evidence underpinning the guideline, can be found here:https://www.nice.org.uk/guidance/cg89/resources/cg89-when-to-suspect-child-maltreatment-full-guideline2.

The evidence tables which detail the studies used to develop each section of the guideline can be found here: https://www.nice.org.uk/guidance/cg89/resources/cg89-when-to-suspect-child-maltreatment-evidence-tables2

Evidence-based medicine reviews

Social Policy Evaluation and Research Unit. 2014. **Effective parenting programmes**. Wellington: Families Commission. http://www.familiescommission.org.nz/sites/default/files/downloads/Effective-Parenting-Programme-Report.pdf

This report reviewed the effectiveness of parenting programmes, as a means of reducing the risk of maltreatment for vulnerable children aged 0–6 years. It included both international and New Zealand programmes. The review of international research focused on programmes that had been evaluated through RCTs or other rigorous research designs involving comparison groups. The programmes that had the most evidence for a reduction in maltreatment were: Nurse Family Partnership (US), Early Start (NZ), Parent-Child Interaction Therapy (US), and SafeCare (US). These programmes also had other positive parenting and child outcomes but were less successful at overcoming parental issues such as maternal depression, drug and alcohol use, and domestic violence. Common elements of effective programmes included factors related to staffing and infrastructure, programme design, content and delivery, and ongoing monitoring and evaluation, but further research is needed to determine which are the most important components and the interaction between components. Further research is also needed on the best ways to engage and retain parents in programmes. When implementation of a programme is being planned it is important to consider the following points: programme appropriateness to local needs, who is targeted, the delivery setting, accessibility and costs, technical assistance that may be required, cultural appropriateness of the programme and the degree to which it can be adapted. This report identified various parenting programmes that are available in New Zealand. It concluded that: Early Start (a comprehensive home-visiting service, developed in Christchurch) has good evidence of effectiveness; Incredible Years and Triple P are supported by international evidence and limited lower quality New Zealand evidence; Parents as First Teachers is based on the US Parents as Teacher programmes which is considered to be evidence-based; international research supports home visiting approaches; and HIPPY programmes which aim to prepare children for formal schooling are supported by good overseas, and some New Zealand, evidence. While there are some programmes specifically designed for Māori and Pacific parents, this review found that little research had been done on their effectiveness and that this knowledge gap needs to be addressed.

Poole MK, Seal DW, Taylor CA. 2014. **A systematic review of universal campaigns targeting child physical abuse prevention**. Health Education Research, 29(3), 388–432. http://her.oxfordjournals.org/content/29/3/388.abstract

This review aimed to assess the impact of universal campaigns with a media component that were aimed at preventing child physical abuse (CPA). It included 17 studies of 15 campaigns conducted in five countries from 1989 to 2011. A variety of different evaluation designs were used and some studies used more than one type. Seven studies were evaluated via RCTs, but most studies used quasi-experimental designs. Only three studies assessed incidence of CPA and two of them found it decreased significantly. Studies also found significant reductions in other relevant outcomes including dysfunctional parenting, child problem behaviours and parental anger, and also increases in parental self-efficacy and knowledge of concepts and actions relevant to child abuse prevention. The most common targets of campaigns were: lack of knowledge of positive parenting techniques, parental impulsivity, the stigma of asking for help, inappropriate expectations of child behaviour for a child's developmental stage, and inadequate social support. The review authors concluded that the evidence base for universal campaigned intended to prevent CPA remains inconclusive as only Triple-P has been rigorously evaluated. They state that further work is needed to develop and rigorously evaluate universal CPA prevention interventions which could shift population norms regarding CPA.

Winokur M, Holtan A, Batchelder Keri E. 2014. **Kinship care for the safety, permanency, and well-being of children removed from the home for maltreatment**. Cochrane Database of Systematic Reviews doi:10.1002/14651858.CD006546.pub3. http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD006546.pub3/abstract

This review aimed to evaluate the effect of kinship care placement (placing children who cannot live at home with other family members or with friends) on the safety, placement stability, and well-being of children removed from the home for maltreatment. It included 122 quasi-experimental studies involving 666,615 children. The studies had considerable methodological and design weaknesses and unclear risks of selection bias, performance bias, detection bias, reporting bias, and attrition bias, with the highest risk associated with selection bias and the lowest associated with reporting bias. A total of 102 studies were included in the qualitative synthesis and results from 71 studies were included in the meta-analysis. Only 13 of the 102 studies were conducted outside the US Meta-analyses suggested that children in kinship foster care experience fewer behavioural problems (standardised mean difference effect size −0.33, 95% CI −0.49 to −0.17), fewer mental health disorders (odds ratio (OR) 0.51, 95% CI 0.42 to 0.62), better well-being (OR 0.50, 95% CI 0.38 to 0.64), and less placement disruption (OR 0.52, 95% CI 0.40 to 0.69) than do children in non-kinship foster care. There was no difference in family reunification rates between children in kinship care and children in non-kinship foster care, although children in non-kinship foster care were more likely to be adopted (OR 2.52, 95% CI 1.42 to 4.49), while children in kinship foster care were more likely to be in guardianship (OR 0.26, 95% CI 0.17 to 0.40). Children in non-kinship foster care were more likely to utilise mental health services (OR 1.79, 95% CI 1.35 to 2.37). The review authors concluded that, bearing in mind the poor quality of the included studies, the evidence supports treating kinship care as a viable out-of-home placement option.

Macvean M, Mildon R, Schlonsky A, et al. 2013. **Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years**. Melbourne: Parenting Research Centre. http://www.parentingrc.org.au/images/stories/NZ_EvidenceReview_ParentingInterventions/MainReport_EvidenceReview_ParentingInterventions_NZ_June2014.pdf

This evidence review was commissioned by the Families Commission to provide background information for the Social Policy Evaluation and Research Unit review (above). It provides details of effective parenting programmes to guide the development and implementation of programmes in New Zealand. It used a Rapid Evidence Assessment (REA) methodology. In total, the review identified 81 parenting interventions, for parents of vulnerable children aged 0–6 years, that focused particularly on prevention of child maltreatment. Twelve of these were considered "effective" because at least one RCT indicated positive effects maintained at six months. Only one of these twelve received the highest evidence rating, "well supported" (at least 2 RCTs demonstrated effectiveness with effects lasting 12 months or more). This intervention was the pre- and post-natal home visiting programme Nurse Family Partnership, which demonstrated an effect on child maltreatment and other relevant outcomes 15 years after the intervention had finished. Of the other 11 effective interventions, four were rated "supported" and seven, "emerging". There were 22 interventions where there was insufficient evidence, and 10 which failed to demonstrate an effect. Thirty-eight interventions were rated "pending" as they had not yet demonstrated maintenance of an effect. The review authors found no interventions which could be rated "Concerning practice". The only New Zealand intervention evaluated by an RCT, Early Start, was rated "emerging" as the reviewers located one RCT which indicated good results on a number of key child, parent and family outcomes, some of which were maintained at nine years. Most of the reviewed interventions were delivered by professionals, typically in the home. They most commonly targeted child behaviour, child development and parent-child interaction. There was little evidence for interventions that targeted specific groups such as indigenous families or parents with intellectual disabilities. The reviewers identified 14 common elements in effective interventions: structured or planned sessions, assessment of the child and family and development of an individualised plan, content often delivered by discussion with the nature of the content largely focused on child behaviour and strategies for managing it (especially positive, non-punitive approaches), parent-child interactions, child health, development and safety, emotional regulation, and issues relating to family wellbeing and life course.

Moyer VA. 2013. **Primary care interventions to prevent child maltreatment: U.S. Preventive Services Task Force recommendation statement**. Annals of Internal Medicine, 159(4), 289–95. http://dx.doi.org/10.7326/0003-4819-159-4-201308200-00667

This recommendation statement from the USPSTF is based on a systematic review (see below) which considered studies of asymptomatic children who received primary care-accessible interventions to prevent child maltreatment. The reviewers identified one fair-quality study of an intervention provided in a clinical setting (the Safe Environment for

Every Kid model) and ten fair quality studies of home visitation programmes to prevent child maltreatment, all published since the previous (2004) USPSTF recommendation. The USPSTF concluded that the current evidence was insufficient to assess the balance of benefits and harms of primary care interventions to prevent child maltreatment in children who do not have any signs or symptoms of maltreatment. The systematic review, which contains more details on the relevant studies, is:

Nelson HD, Selph S, Bougatsos C, et al. 2013. **Behavioral interventions and counseling to prevent child abuse and neglect: Systematic review to update the U.S. Preventive Services Task Force recommendation. Evidence synthesis No. 98 AHRQ Publication No. 13-05176-EF-1**. Rockville (MD): Agency for Healthcare Research and Quality (US). http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0052380/ .

Louwers ECFM, et al. 2010. **Screening for child abuse at emergency departments: a systematic review**. Archives of Disease in Childhood, 95(3), 214–18. http://adc.bmj.com/content/95/3/214.long

This review assessed the effectiveness of interventions applied at emergency departments on increasing the detection rate of confirmed cases of child abuse. Four observational trials were included in the review (n=8907). After implementation of the screening tool, the rate of detected cases of suspected child abuse increased by 180% (weighted mean in three studies). However, there were no significant increases in the number of confirmed cases of child abuse, reported in two out of four studies. In one study, 11 of the 36 cases (30%) were found to be true accidents after a full assessment, and the other study reported 58 (26%) confirmed cases out of 220 suspected cases. The authors concluded that there was no conclusive evidence to confirm that screening interventions at EDs result in increased detection of cases of confirmed abuse.

Other relevant publications

Social Policy Evaluation and Research Unit. 2014. **Assessment of the design and implementation of the children's teams**. Wellington: Families Commission.
http://www.familiescommission.org.nz/sites/default/files/downloads/Childrens-Teams-Assessment_0.pdf

Children's teams are a key component of the Government's Children's Action Plan. They bring together professionals and NGOs from across all the sectors to meet the needs of vulnerable children and their families. Each team has a lead professional who is the key point of contact for the child. This report by the Social Policy Evaluation and Research Unit (SuPERU) addresses the question: Is the design right? The SuPERU identified a number of elements critical to the performance of the Children's Team model and grouped these under five headings: planning and development, partnership, implementation, systems change, and scaling up. Reviewing the two regional demonstration sites in Rotorua and Whangarei, it found that progress had been made in some elements such as building a shared vision, collective ownership and building a working model but that there were challenges in other areas such as information sharing and funding and accountability processes. The Social Policy Evaluation and Research Unit stated that, as the model develops and expands, increased attention will probably need to be paid to workforce capacity and common accountability measures. It concluded that the Children's Teams were implemented before their design was universally agreed on, understood and supported at all levels across all sectors and therefore expectations regarding what the demonstration sites would achieve were probably inappropriately high but that nevertheless the model was up and running and there were signs of a more integrated planning approach to service design which was getting closer to meeting the governance, resourcing and timeframe requirements for successful service development and implementation.

Murphy C, Paton N, Gulliver P, et al. 2013. **Understanding connections and relationships: Child maltreatment, intimate partner violence and parenting**. Auckland: New Zealand Family Violence Clearinghouse, The University of Auckland. https://nzfvc.org.nz/issues-papers-3

This issues paper reviews the evidence on the frequency with which child maltreatment co-occurs with intimate partner violence. It reports that the United States NatSCEV study found that over their lifetimes 57% of those who had witnessed intimate partner violence were maltreated, compared to 11% of those who had not. It states that there needs to be more recognition of the links between child maltreatment and intimate partner violence and of the importance of supporting children's relationships with the non-abusive parent.

Fergusson DM, McLeod GFH, Horwood LJ. 2013. **Childhood sexual abuse and adult developmental outcomes: Findings from a 30-year longitudinal study in New Zealand**. Child Abuse & Neglect, 37(9), 664–74

This paper reports on data gathered from over 900 participants in the Christchurch Health and Development Study. At ages 18 and 21 young people were asked about child sexual abuse (CSA) before age 16. Mental health, psychological wellbeing, sexual risk-taking behaviours, physical health and socioeconomic outcomes were assessed up to till age 30. The study found that, after adjustment for confounding by child, socio-demographic and family functioning factors, there were small to moderate associations between the extent of CSA and increased rates of major depression, anxiety, suicidal ideation, suicide attempts, alcohol dependence and illicit drug use. At age 30, CSA was associated with increased rates of PTSD symptoms, decreased self-esteem and decreased life satisfaction. In addition, CSA was associated with decreased age of first sexual activity, greater number of sexual partners, increased medical contacts for physical health problems, and welfare dependence. The attributable risks for the mental health problems ranged from 5.7% to 16.6%. The study authors concluded that, although the individual effects sizes for CSA are typically small to moderate, the cumulative effect of CSA on adult developmental outcomes is clearly considerable.

Penehira M, Doherty L. 2013. **Tu mai te oriori, nau mai te hauora! A kaupapa Māori approach to infant mental health: adapting Mellow Parenting for Māori mothers in Aotearoa, New Zealand**. Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health, 10(3), 367–82. http://www.pimatisiwin.com/online/wp-content/uploads/2013/02/09PenehiraDoherty.pdf

This paper reports on a pilot study which aimed to evaluate the acceptability and effectiveness of Hoki ki te Rito (an Māori cultural adaptation of Mellow Parenting) an intensive parenting programme delivered to Māori mothers from socially disadvantaged areas in South Auckland who had children aged 0–5 years and relationship difficulties along with child behaviour difficulties. The programme was well received and the mothers and grandmothers who attended reported significant increases in their own wellbeing, their feelings of self-esteem and adequacy, their ability to cope with their parenting role and their children's behaviour, confidence in their cultural identity, and their children's social skills, as well as reductions in their children's problem behaviours.

Wessels I, Mikton C, Ward C L, et al. 2013. **Preventing violence: Evaluating outcomes of parenting programmes**. Geneva: World Health Organization. http://apps.who.int/iris/bitstream/10665/85994/1/9789241505956_eng.pdf

Child maltreatment is more likely to occur in families that have difficulties with developing stable, warm and positive relationships. Parenting programmes are one way to strengthen parenting, and, although they do not always specifically aim to prevent violence, they have the potential to do so. This brief and accessible publication was designed for policy makers, government officials, programme developers, NGOs, community-based organisations and donors in low to middle income countries. Section one deals with outcome evaluation and Section Two reviews the evidence for the effectiveness of parenting programmes aimed at preventing violence, discusses adapting programmes from one culture to another, and sets out the characteristics common to effective programmes.

Fergusson D M, Boden J, Horwood J. 2012. **Early Start evaluation report: nine year follow-up**. Wellington: Ministry of Social Development. http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/evaluation/early-start-evaluation-report-nine-year-follow-up.pdf

Early Start is a home visiting service aimed at families of infants who are facing severe social, economic or emotional challenges. It was set up in Christchurch in the mid 1990s. This report describes the evaluation of Early Start via a RCT which involved comparing 220 families who received Early Start with a control group of 223 families who did not receive Early Start over a nine-year follow-up period. Families were identified for inclusion in the study by Plunket Nurses. At 36 months, the children in the Early Start group had greater use of health services; lower rates of hospital attendance for childhood accidents; greater use of early childhood education and dental services; lower rates of parental reported childhood physical abuse; less punitive and more positive parenting; and lower rates of problem behaviours. By nine year follow-up, the early start children had 33% lower rates of hospital; attendance for childhood accidents, 50% lower rates of parent-reported physical child abuse, more positive mean scores on measures of parenting competence and punitive parenting and lower parent-reported scores for child behaviour problems. The effect sizes ranged from small to moderate. At neither 36 months nor nine years were there any benefits of Early Start for a wide range of parental and family outcomes including maternal depression, parental substance abuse, family violence, family material and economic wellbeing and family stress and adversity. The report's authors stated that these findings highlighted the need to develop better links and integration between home visiting services and other family-related services such as family planning services, adult mental health services, educational and career support services, budgeting services and relationship services. They also stated that key factors in the success of Early Start were probably the research base of the programme, professionally trained staff, and the development of standards and service manuals for the programme.

The paper below contains more detail on the methods of the RCT and the statistical analysis of the results:

Fergusson DM, Boden JM, Horwood LJ. 2013. **Nine-Year follow-up of a home-visitation program: A randomized trial**. Pediatrics, 131(2), 297–303. http://pediatrics.aappublications.org/content/131/2/297.abstract

Dalziel K, Segal L. 2012. **Home visiting programmes for the prevention of child maltreatment: cost-effectiveness of 33 programmes**. Archives of Disease in Childhood, 97(9), 787–98. http://adc.bmj.com/content/97/9/787.abstract

This Australian study aimed to determine the cost-effectiveness of home visiting programmes for the prevention of child maltreatment. The study authors evaluated 33 programmes identified through a systematic review of published trials. For the 25 programmes that were not dominated (i.e. did not cost more than another equally effective or better intervention) cost effectiveness estimated were derived. The incremental cost of home visiting (compared to usual care) ranged from A$1800 to A$30,000 per family. Estimated of costs per case of child maltreatment averted ranged from $A22,000 to several million dollars. Seven of the 22 programmes (32%) of at least adequate quality were found to be cost saving when lifetime cost offsets were included, including the New Zealand Early Start programme. The study authors concluded that there is wide variation in the costs of home visiting programmes which aim to prevent child maltreatment and that the most cost-effective programmes employ professional home visitors in a multi-disciplinary team, target high-risk populations and include more than just home visiting (e.g. phone contact, referral to other services, clinic visits, transport assistance, social work services, housing assistance, parenting groups).

Centre for Applied Research in Economics. 2012. **Vulnerable children: Can administrative data be used to identify children at risk of adverse outcomes?** Auckland: Centre for Applied Research in Economics (CARE), Department of Economics, University of Auckland. http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/vulnerable-children/auckland-university-can-administrative-data-be-used-to-identify-children-at-risk-of-adverse-outcome.pdf

This is the report of a project which aimed to develop and test an automatic risk scoring tool (a predictive risk model, PRM) for assessing the risk that a New Zealand child will have a maltreatment finding at some future time. A PRM is an automated algorithm which gathers data from a variety of sources and uses it to generate a risk score. A "maltreatment

finding" is a substantiated finding of emotional, physical or sexual abuse or neglect by age five. In this project the PRM automatically generated a risk score for children either (1) when they arrived on the benefit system or (2) when their circumstances changed once they were supported by a benefit. The report authors noted that 83% of all children having a maltreatment finding by the age of five are seen on a benefit by the age of two. They stated that the most at risk children identified by their model constitute 37% of the children who will have a maltreatment finding by age five, despite being only 5% of the total population. They estimated if children in the 20% most risky benefit spells were offered a programme such as the Nurse Family Partnership (which has been shown in overseas studies to reduce rates of maltreatment by 46%) it would cost $48,000 per maltreatment finding avoided and that if families entered a programme as soon as a child in the family was identified as being in a top 20% risky benefit spell only a small fraction of children would have a maltreatment finding in the first year. This report also includes a summary of the findings from a literature review covering preventive interventions, the international use of Actuarial Risk Assessment tools in child protection, and the use of PRM in the health sector. The review found that, at the time of writing, no jurisdictions were actively using, or had used, PRMs in child protection.

Kerslake Hendricks A, Stevens K. 2012. **Safety of subsequent children: International literature review**. Wellington: Families Commission. http://www.familiescommission.org.nz/sites/default/files/downloads/SoSC-international-literature-review.pdf

This review was undertaken at the request of the Minister for Social Development and Employment. It deals with parents who have lost custody of children through a care and protection intervention and who then have additional children who may be at risk. It considers: what will help families to overcome their complex issues so that subsequent children are not at risk, and what can be done to prevent subsequent children being born while parents are still addressing their complex issues. The review identified only one small study directly relevant to the review topic (an Australian review of 14 cases where a young child had died in a family from which other children had previously been removed, supplemented by a literature search) so the scope of the review was broadened to include studies of complex families, studies of high risk or vulnerable infants, recurrent child maltreatment and reviews of child deaths and serious maltreatment incidents. In the literature, the following characteristics were often identified in families with care and protection issues: neglect, previous child removal, parental mental health problems, parental intellectual disability, parental substance abuse, family violence. Within these families there are characteristics of children that can make them more vulnerable: being born prematurely and/or affected by in-utero exposure to alcohol and/or drugs, being disabled, being more difficult or less rewarding (from a parent's perspective) than other siblings, returning home from foster care especially if suffering the loss of an attachment figure (often the foster carer), and being a teenager displaying risk-taking or anti-social behaviour. It is easiest to identify subsequent children in families where a previous child had been removed if cases are still active with social services. Where this is not the case effective referral pathways are needed. There is potential for improved identification of subsequent children through education of professionals and the public, alert systems, mandatory reporting, and better relationships and information sharing between health and social services, but there is a need for research evaluating of the effectiveness of these approaches. One families are referred, the literature suggests that effective assessments are those which: are conducted by well-trained staff, use professional judgement as well as assessment tools, consider the cumulative and interactive effects of families' risks and strengths, consider family structures especially the presence of new men in households, and are undertaken in already known households in response to new information or changing circumstances. No literature relating interventions specifically for families where a previous child had been removed was identified but the review authors discuss a variety of programmes for "complex families" and state that the evidence for the effectiveness of these is mixed. While some help to improve parent-child relationships and parental knowledge, and reduce child abuse, they tend to be less effective at addressing adults' problems or families' broader social needs over the long term. The review authors did not find any programmes with long term effectiveness in preventing neglect. They stated that it is known that vulnerable women are likely to have unplanned pregnancies and suggest that better contraceptive services that are easy to access, non-stigmatising and subsidised may be needed. In their conclusions they stated that there are significant knowledge gaps in the research literature regarding the needs of families who have had children removed and how to protect subsequent children born into such families.

Cram F. 2012. **Safety of subsequent children: Māori children and whānau** Wellington: Families Commission. http://www.familiescommission.org.nz/sites/default/files/downloads/SoSC-Maori-and-Whanau.pdf

This review is a companion to the one above. It seeks to understand the reasons why Māori children and families are over-represented in the welfare system, particularly in child removal statistics, and how whānau who have previously had a child removed can be better supported. It uses Mason Durie's holistic Māori wellness model, Te Pae Mahutonga, to examine Mauri Ora (access to Māori cultural identity, Te Ōranga (participation in society) and Toiora (healthy lifestyles) as determinants of Māori whānau wellness. It then explores the Māori initiatives that support and strengthen whānau as an expression of Te Mana Whakahaere (autonomy). As yet, the impact of Kaupapa Māori parenting and whānau support programmes and services on child maltreatment rates has not been systematically examined and it is probably unrealistic to expect that such programmes can achieve good and long lasting results unless attention is also paid to the social and economic disparities faced by many Māori whānau in New Zealand.

Te Puni Kōkiri. 2010. **Arotake tūkino Whānau literature review on family violence**. Wellington: Te Puni Kōkiri. http://www.tpk.govt.nz/en/in-print/our-publications/fact-sheets/safer-whanau/download/tpk-family-violence-literature-review.pdf

This literature review found that there was little research on uniquely Māori approaches to reducing family violence. Sections in this publication cover: an overview of family violence among Māori today, traditional Māori views on family violence, the impact of colonisation on traditional views and practices, an exploration of the ways in which traditional knowledge have been, and can be, used to create interventions to address family violence, definitions of family violence

and the need to broaden the definition of family violence to include the complexities of relationships within whānau and the effects of colonisation and racism on whānau, and an overview of some kaupapa Māori based programmes.

Mardani J. 2010. **Preventing child neglect in New Zealand: A public health assessment of the evidence, current approach, and best practice guidance**. Wellington: Office of the Children's Commissioner. http://www.occ.org.nz/assets/Uploads/Reports/Child-abuse-and-neglect/Preventing-child-neglect.pdf

This report reviews the nature and consequences of child neglect; and the effectiveness of interventions to prevent the recurrence of neglect. It begins with a literature review which found that targeted preventive programmes such as home visiting, parent education and multi-component interventions have shown some benefits but there no evidence for the effectiveness of interventions aimed at preventing recurrence of child neglect. It also found some limited evidence for the effectiveness of resilient peer treatment, imaginative play training and multi-systemic therapy for improving the wellbeing of neglected children although there was a lack of rigorous studies of treatments for neglected children and their families. The report then describes the prevalence of neglect in New Zealand, using Child Youth and Family (CYF) data from 2009. It summarises government agencies' responses to neglect and compares these responses to best practice. The report includes findings from a series of stakeholder interviews with professionals from CYF, Police, and the health and education sectors. The report concludes with recommendations aimed at key government agencies for strengthening the prevention of recurrent neglect.

Friends National Resource Center for Community-Based Child Abuse Prevention. 2009. **Evidence-based and evidence-informed programs**. Chapel Hill, NC: Friends National Resource Center for CBCAP. http://friendsnrc.org/joomdocs/eb_prog_direct.pdf

This US publication was designed to assist Community-Based Child Abuse Prevention Lead Agencies to identify possible programme they may wish to consider funding. There is a summary matrix listing programmes reviewed by four national registries of evidence-based programmes, followed by a programme directory providing more detail and references for each of the programmes. The following programmes are reported to be well-supported by evidence: Early Head Start, Families and Schools Together, Incredible Years, Nurse Family Partnership, Parent Child interaction Therapy, Strengthening Families and Triple P.

Websites

New Zealand Family Violence Clearinghouse. https://nzfvc.org.nz/

The New Zealand Family Violence Clearinghouse is the national centre for collating and disseminating information about domestic and family violence in Aotearoa New Zealand. It is funded by the Families Commission and located at the School of Population Health, the University of Auckland. The library on this site contains a large number of resources, particularly New Zealand publications. The library search engine does not make it easy to search for evidence-based prevention interventions specifically so the assistance of a librarian may need to be sought.

Cardiff Child Protection Systematic Reviews (Core Info). http://www.core-info.cardiff.ac.uk/

Cardiff Child Protection Systematic Reviews (Core Info) is a collaboration between the National Society for the Prevention of Cruelty to Children and the Early Years research section of the Cochrane Institute of Primary Care and Public Health, Department of Child Health, School of Medicine, Cardiff University. Their site provides a series of systematic reviews of the literature relating to physical abuse and neglect of children. The review topics include: dental neglect, early years neglect/emotional abuse, parent-child interaction, school aged neglect/emotional abuse, bites, bruising, burns, fractures, neurological injuries, oral injuries, retinal findings, spinal injuries, and visceral injuries. These reviews are of particular interest to practitioners who need to recognise and report on abuse and neglect.

Children's Bureau, Administration for Children and Families, US Department of Health and Human Services. **Child Welfare Information Gateway**. https://www.childwelfare.gov/

This site contains resources on topics including child welfare, child abuse and neglect, out-of-home care, and adoption. The page on evidence-based practice in child abuse prevention programmes, which can be found here: https://www.childwelfare.gov/preventing/evidence/ may be especially helpful for those considering implementing such programmes.

The California Evidence-Based Clearinghouse for Child Welfare. http://www.cebc4cw.org/

The primary purpose of this website is to provide searchable database of programmes that can be utilized by professionals who serve children and families involved with the child welfare system. The page on Home Visiting Programs for Prevention of Child Abuse and Neglect, http://www.cebc4cw.org/topic/home-visiting-for-prevention-of-child-abuse-and-neglect/ provides information on various programmes and rates programmes according to the strength of the research evidence supporting them. The only programme well-supported by research evidence (at least two RCTs, at least one of which showed a sustained effect at least one year) is *Nurse-Family Partnership* which provides home visits by registered nurses to first-time, low-income mothers, beginning in pregnancy and continuing until the child's second birthday. The page on Prevention of Child Abuse and Neglect (Secondary) Programs, which can be found here: http://www.cebc4cw.org/topic/prevention-of-child-abuse-and-neglect-secondary/ provides information on programmes targeted at individuals or families who are at high risk for maltreatment with the aim of preventing abuse or neglect from occurring. The only programme well-supported by research evidence is *The Incredible Years,* which involves training programmes for parents, children and teachers. The curricula are designed to promote emotional and social competence; and to prevent, reduce, and treat behaviour and emotional problems in young children.