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E Tipu e Rea



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**Brief Evidence Reviews for the Well Child
Tamariki Ora Programme**

***Whakapūpūtia mai ō mānuka,
kia kore ai e whati***

*Cluster the branches of the manuka,
so they will not break*

Foreword

The Ministry of Health is responsible for the development of policy advice on children's health and the future direction of the Well Child Tamariki Ora (WCTO) programme. The WCTO programme is the universal health service in New Zealand, which is responsible for protecting and improving the health and wellbeing of children from birth to 5 years of age. This is achieved through health and development screening and surveillance, whānau care and support, and health education.

The current programme is based on the evidence available at the time of the last programme update in 2007. Therefore, the Ministry of Health is reviewing the current WCTO Framework and associated Schedule (developed in 2002) to ensure that WCTO services meet the current needs of children and their whānau, and address the issues they face. The present review was initiated in 2019 and is the second review of the programme, as the first was carried out in 2006. In preparation for this review, the Ministry of Health has commissioned an evaluation of the recent literature on some of the new and emerging issues for preschool children, as well as possible ways to address them.

The purpose of this review includes ensuring that the programme is underpinned by the latest research and evidence. This is particularly pertinent to the current Schedule of Universal Contacts delivered, and one of the work-streams of the review is to consider the timing, content, and intensity of the Schedule, and associated additional contacts. This work stream will support the development of an integrated framework of universal wellbeing contacts for the pregnancy to 24 years of age life course.

The Ministry of Health require the brief evidence reviews (BERs) to synthesise relevant evidence about what works in key areas for children, including development, vision, hearing, emotional and mental health, and growth. The BERs adopted the He Awa Whiria – Braided Rivers approach and include consideration of what will work for Māori tamariki and whānau, and Pacific children and families within each domain. The BERs have helped to identify any knowledge gaps where further work and research may be needed, to inform further development of the WCTO programme.

The WCTO review is a key health contribution to the Government's Child and Youth Well-being Strategy. It forms part of the Ministry of Health's work programme to transform its approach to supporting maternal, child, and youth well-being.

The Ministry of Health have commissioned A Better Start: E Tipu E Rea National Science Challenge to undertake 11 health related BERs that will inform the WCTO review and decision making on the future core service schedule, and additional health and social services for children in New Zealand. The aim of the BERs is to ensure that decisions are grounded in, and informed by, up-to-date evidence. BERs are intended to synthesise available evidence and meet time constraints of health care decision makers. Internationally health technology agencies have embraced rapid reviews, with most agencies internationally offering these alongside standard reviews. These 11 BERs that we have conducted have been performed in a very short time which was a very challenging task.

A Better Start is a national research programme funded by the Ministry of Business Innovation and Employment (MBIE). The objective of A Better Start is to improve the potential for all young New Zealanders to lead a healthy and successful life. To achieve this, A Better Start is researching methods and tools to predict, prevent, and intervene so children have a healthy weight, are successful learners, and are emotionally and socially well-adjusted. A Better Start consists of more than 120 researchers across 8 institutions.

The BERs cover 11 domains critical to the WCTO programme, which are: neurodevelopment (#1); parent-child relationships (#2); social, emotional, and behavioural screening (#3); parental mental health problems during pregnancy and the postnatal period (#4); parental alcohol and drug use (#5); excessive weight gain and poor growth (#6); vision (#7); oral health (#8); adverse childhood experiences (#9); hearing (#10); and family violence (#11). The BERs have synthesised relevant evidence about what works in key areas for children across these domains, which were assessed with careful consideration of what will work for Māori tamariki and whānau and Pacific children and families. They have also identified knowledge gaps where further work and research may be needed to inform further development of the WCTO programme.

Within each domain, a series of 6–14 specific questions were drafted by the Ministry of Health, and subsequently refined with input from the large team of researchers assembled by A Better Start. A Better Start established discrete writing teams to undertake each BER. These teams largely consisted of a post-doctoral research fellow and specialty expert, often in consultation with other experts in the field. Subsequently, each BER was peer reviewed by at least two independent experts in the field, as well as two Māori and a Pacific senior researcher. In addition, senior clinical staff from the Ministry of Health have reviewed each BER. These were then revised to address all the feedback received, checked by the editors, and finalised for inclusion in this report.

Whilst each of these domains are reviewed as discrete entities, there is considerably inter-relatedness between them. In particular, neurodevelopmental problems can be impacted by parent-child relationships, parental mental health, and pre- and postnatal drug exposure. Similarly, children who have problems with growth, vision, or oral health may also have neurodevelopmental disorders.

Most of the evidence available for these BERs comes from international studies with limited data from New Zealand, in particular there is limited information about Māori, Pacific, and disadvantaged families. These are the tamariki and whānau in whom the WCTO Programme services are more scarce, yet could potentially offer the greatest benefit.

The criteria for screening include the requirement for an effective and accessible intervention; the corollary is that screening should not be offered if there is no benefit to the individual being screened. The essential issue is therefore to identify those infants and preschool children and their whānau who would have better outcomes following intervention; this includes better outcomes for the whānau.

The current WCTO programme has had a greater emphasis on surveillance rather than screening. Many of the questions in the BERs address screening. A change in the WCTO programme that further extends into screening will require substantial upskilling of many WCTO providers, as well as redirection of resources. Importantly, Māori and Pacific iwi and community views must be considered before any new screening programmes are to be included.

It should be noted that a shift towards screening rather than surveillance may prevent health and behavioural problems. The economic benefits of prevention and early intervention are well documented, with early interventions showing that for every dollar spent there are substantial savings to health, social services, police, and special education resources.



Professor Wayne Cutfield
Director of A Better Start National Science Challenge
On behalf of the editors, authors and reviewers of the brief evidence reviews

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11 Family violence screening and intervention

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Table of Contents

Table of Contents	309
List of Figures and Tables	309
Abbreviations	310
Summary	310
Method.....	311
11.1 Introduction to concepts	312
11.2 What is the prevalence of family violence in New Zealand during pregnancy and childhood?	315
11.3 Prevalence of IPV	316
11.4 What suitable tests are available and when is the optimal time to screen for family violence?	319
11.5 What screening takes place in practice?	320
11.6 What interventions or additional support for family violence is effective following detection? Is it currently well implemented in NZ? Does early intervention lead to significant improvements later in childhood/adolescence?	325
11.7 Are there any known harms from screening for family violence?	330
11.8 What do we know from a Māori and Pacific knowledge basis about screening in this domain?.....	330
11.9 Recommendations for future action	333
11.10 Graded Evaluations	334
References.....	335

List of Figures and Tables

Figure 11.1. Health effects in adulthood of exposure to child abuse and neglect.	313
Figure 11.2. Recommended questions for enquiring about intimate partner violence at Well Child/Tamariki Ora visits.....	322
Table 11.1. Lifetime health disorders associated with CAN.....	313
Table 11.2. Schedule of Well Child/Tamariki Ora visits that include a family violence assessment.....	321
Table 11.3. Sensitivity and specificity of selected screening tools for IPV.....	323
Table 11.4. Graded evaluation of screening tools and associated recommendations for policy and practice. .	334
Table 11.5. Graded evaluation of interventions and associated recommendations for policy and practice.	334

Abbreviations

AAS	Abuse Assessment Screen
CAN	Child abuse and neglect include: physical, emotional or sexual abuse, physical or emotional neglect
CAS	Composite Abuse Scale
CBT	Cognitive Behavioural Therapy
CTS2	Revised Conflict Tactics Scale
HARK	Humiliated, Afraid, Rape, Kick: IPV screening tool
HITS	Hurts, Insults, Threatens, Screams
IPV	Intimate partner violence can include physical, emotional, sexual or economic abuse
ISA	Index of Spouse Abuse
SUDI	Sudden Unexplained Deaths in Infancy
WCTO	Well Child/Tamariki Ora

Summary

- Family violence is common in New Zealand, though the exact prevalence is difficult to estimate due to heterogeneous and limited data particularly within the context of Well Child Tamariki Ora.
- 23.5% of New Zealand children are likely to be reported to Oranga Tamariki before 18 years of age due to concerns about their safety or wellbeing but is almost one in two for Māori children
- 33% of New Zealand women experience physical or sexual violence from an intimate partner in their lives. More than half of children may be exposed to emotional violence between their caregivers, and 15-20% witness physical violence at home.
- Māori and Pacific whānau are disproportionately burdened with family violence, associated homicide, and involvement with child protective services.
- Despite poor evidence that screening results in reductions in family violence, it provides an opportunity for education and intervention and may have benefits even for women who do not disclose abuse.
- The Ministry of Health recommends regular, routine enquiry for family violence accessing healthcare for women and well-child checks, but it is unclear what screening occurs in practice.
- As far as we are aware, no universal screening tools for IPV or CAN have been validated in New Zealand populations.
- Screening for family violence should include management of associated issues (e.g. mental health problems, substance use disorders).
- Programmes such as The Incredible Years Parenting programme, which has been offered to at-risk families as part of Family Start, has positive effects on parenting and on family relationships.
- A Whānau Ora approach to addressing family violence appears to be an effective and empowering option for whānau who are ready to address violence in their homes.

- There is a lack of research about screening and interventions and what works for Māori and Pacific, aside from the Ngā Tau Mīraho o Aotearoa research recently published that focuses on the cost benefits of a cultural adaption of the Incredible Years Parenting Programme.
- Testing of validated screening tools within NZ and ethnic settings is recommended, given the lack of tools within the NZ health context.

Method

We used the following strategy to identify and retrieve relevant evidence relevant to the questions guiding this rapid review. These questions are:

1. What is the prevalence of family violence in New Zealand during pregnancy and childhood?
2. What suitable tests are available and when is the optimal time to screen for family violence?
3. What interventions or additional support for family violence is effective following detection? Is it currently well implemented in NZ? Does early intervention lead to significant improvements later in childhood/ adolescence?
4. Are there any known harms from screening for family violence?
5. What do we know from a Māori and Pacific knowledge basis about screening in this domain?

The strategy used for this rapid literature review included searching the PubMed and EBSCO databases for peer-reviewed articles published between 2000 and 2019. The Cochrane libraries were also accessed for systematic reviews on family violence. The following keywords were used to access the publications:

- ‘domestic violence’, ‘child abuse’, ‘prevalence’, ‘mass screening’, ‘questionnaire’, ‘intervention’, ‘New Zealand’, ‘indigenous’, ‘systematic review’, ‘meta-analysis’.

The inclusion criteria were:

- publications available in the English language;
- published between 2000-2019;
- focused specifically on screening, prevalence, and intervention for intimate partner violence (IPV) and/or child abuse and neglect (CAN); and
- included, where possible, Māori or Pacific populations.

We took initially searched evidence of screening and interventions demonstrating success in New Zealand; then indigenous populations in other countries; then meta-analyses or systematic reviews with strong evidence for interventions not used in either NZ or indigenous populations.

Following the review of databases, relevant websites and databases focused on New Zealand research and policy were searched: These included the Family Violence Clearinghouse, the Centre for Interdisciplinary Trauma Research, the Dunedin Multidisciplinary Health and Development Study, and the Ministry of Health.

11.1 Introduction to concepts

11.1.1 Family Violence

Family violence describes violence between members of the same family, whānau, or household. Family violence encompasses physical violence and emotional, psychological, financial, and sexual abuse; and the physical and emotional neglect of dependent family members. Family violence affects the safety and development of an exposed child. This review focuses on intimate partner violence (IPV) and child abuse and neglect (CAN) due to the direct or indirect influence of exposure to violence on young children's wellbeing. Fairhall¹, commenting on the Treasury's review of the family violence legislation stated: "There is a lack of clear and convincing evidence for what works in responding to family violence. This is impacted by a range of factors including inconsistent understandings of what constitutes family violence, and low reporting of family violence to Police"¹ (p.1). It is within this context this rapid review was undertaken.

Child maltreatment and IPV are significant financial and social burdens in New Zealand that include the loss of productivity, pain, suffering, and premature mortality experienced by victims. Kahui and Snively² estimated family violence costs NZD 4.1-7.0 billion in 2014. Recently the New Zealand Family Violence Death Review Committee (FVDRC) reported 194 family violence deaths between 2009 and 2015 comprising 92 IPV and 56 CAN deaths³. The FVDRC highlights the deaths of women and children are a consequence of family violence, making up three-quarters of four family violence homicides.ⁱ

11.1.2 Child abuse and neglect

The FVDRC's definition of CAN refers broadly to "...all forms of physical and emotional ill-treatment, sexual abuse, neglect and exploitation that actually or potentially harms a child's health and development or dignity"³ (p. 62). The World Health Organization's definition of child maltreatment is consistent and includes physical, sexual or psychological violence against persons under the age of 18 years, and neglect of infants, children, and adolescents by a caregiver⁴. Psychological abuse in this context refers to harmful patterns of behaviour that include hostile treatment such as threats, intimidation, rejection, ridicule, or restricting a child's movements⁴. For the purposes of this review CAN refers to maltreatment by an authority figure in the home setting, although CAN also take place in diverse settings such as schools or in state care facilities. Furthermore, CAN and IPV are intertwined forms of family violence whereby mothers and children together are likely to be exposed to the harm⁵.

CAN and family violence are significant causes of long-term health issues – the physical, psychological, emotional, spiritual and social morbidity and mortality that affects children into their adulthood in diverse ways⁶⁻⁸. In addition to immediate effects on mood, behaviour, confidence, and perceptions of safety⁹, CAN strongly impacts psychological functioning and antisocial behavior later in life¹⁰. One meta-analysis suggests CAN contributes to half of the depression and anxiety globally¹¹. During adolescence and adulthood, physical, sexual, or emotional abuse and neglect are all associated with an increased risk for mental health problems including depressive and anxiety disorders, suicidal behaviours, eating disorders; and post-traumatic stress disorder and panic disorders are linked to physical or sexual abuse¹¹⁻¹³. Sexual abuse is also associated with sleep disorders¹² and somatic disorders such as pelvic or non-specific chronic pain, functional gastrointestinal disorders, and psychogenic seizures¹⁴.

ⁱ The Family Violence Death Review Committee excludes deaths related to family violence due to suicide, assisted suicide, or chronic illness, or the death of non-family members who were bystanders or intervened in family violence episodes.

Exposure to CAN increases a child’s risk of developing several health disorders throughout their life as a result of both physiological and behavioural mechanisms (Figure 11.1). Table 11.1 itemises examples of the impacts CAN has on a person’s health. More detail about the impact of adverse childhood experiences is described in domain three of this Well Child Tamariki Ora review series.

Table 11.1. Lifetime health disorders associated with CAN

Non-Communicable Diseases (NCD)	Risky Behaviours
<ul style="list-style-type: none">• Stroke• Heart Disease• Diabetes• Cancer⁴• Overweight/obesity¹⁵• Arthritis• Ulcers• Headaches/Migraines• [less convincing evidence]¹³	<ul style="list-style-type: none">• Sexual activities leading to:<ul style="list-style-type: none">▪ STIs and HIV• Alcohol and substance use• Smoking• Increased likelihood of being a victim or a perpetrator of violence in adulthood¹³

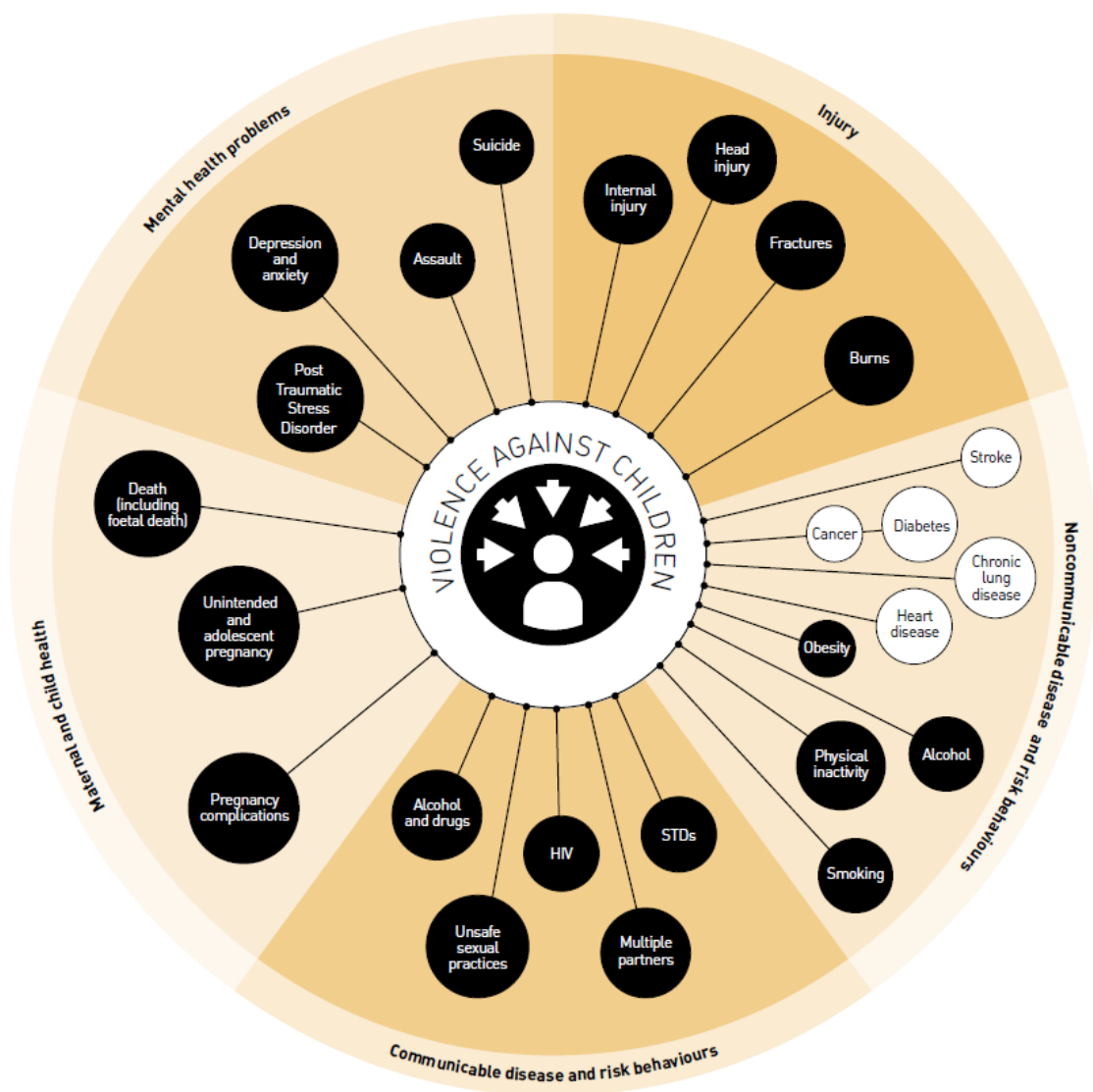


Figure 11.1. Health effects in adulthood of exposure to child abuse and neglect.
Source: World Health Organization INSPIRE report⁴

11.1.3 Intimate partner violence

IPV results in physical, psychological, or sexual harm within an intimate relationship^{4,16} characterised by women's fear of their partner and a partner's control of a woman¹⁷. IPV, sometimes called intimate terrorism, is less common than and differentiated from situational or mutual couple conflict which is perpetrated by both men (55%) and women (44%)¹⁷. Though IPV can affect any person in an intimate relationship including same-sex relationships, it is commonly gendered – that is, a male offender abusing a female partner⁴, with women bearing the greatest burden of harm from assault requiring hospitalization and causing death^{3,18}. IPV often combines several abusive and controlling behaviour patterns such as manipulation, coercion, harassment, intimidation, surveillance and talking, and gaslighting^{ii,3,19}. Such behaviours deprive victims of control over their finances, reproductive choices, time spent with family and friends, and increases their risk of precarity^{2,19-22}.

Reproductive control is a form of coercive control by abusive partners that often goes unrecognized. Such forms of control can result in increased sexually transmitted infections, HIV and unintended pregnancies. Partners use various forms of coercion that include contraceptive sabotage, threats of physical harm, verbal abuse, forced sex that result in women being afraid to ask their partner to wear a condom or refusing sex^{23,24}.

Intimate partner violence affects a child's development before and after their birth - women with lifetime experiences of IPV are at increased risk for pregnancy complications including miscarriage and premature birth²⁵. Pregnant or post-partum women are also at increased risk of IPV by their partners. Despite these events increasing contact with health professionals, they are unlikely to have been screened for IPV²⁶.

IPV and CAN commonly co-occur and have overlapping risk factors. Two US surveys suggested that between a third and half of the children lived in homes where they witnessed IPV and were also subjected to maltreatment^{27,28}. There are several explanations for this co-occurrence: (a) an abusive parent may also abuse other family members, and (b) threatened or actual violence towards children is used to intimidate or control their partner^{3,20}. Further, mothers who are victims of IPV are more likely to use physically or psychologically hypervigilant approaches to parenting^{28,29}. Corporal punishment is a strong risk factor for physical abuse and other poor outcomes for children, although is not always considered to be abuse³⁰. Children exposed to IPV in their homes are more likely to engage in disruptive behaviours, which contributes to a higher likelihood of receiving physical punishment or other harsh discipline²⁹.

The disruption of mother-child relationships as a result of dysfunctional family dynamics and poor maternal mental health are indirect effects of IPV on child outcomes (see Domains Two and Four of this Well Child Tamariki Ora review). Children who are living in households with IPV are at increased risk for health, behavioural, and mental health problems, which are likely to persist into adulthood^{29,31}. They also have an increased chance of becoming either a perpetrator or victim of IPV, contributing to an intergenerational cycle of violence^{32,33}.

11.1.4 Context of family violence

Family violence occurs across all social and ethnic groups in New Zealand, but often in environments with multiple risks to child development and family functioning^{25,34-37}. Low income is associated with increased odds of both CAN and IPV^{25,37}, while increasing vulnerable families' incomes through welfare

ⁱⁱ Gaslighting refers to the psychological abuse that leads the victim to question their own mental wellbeing.

benefits reduces their likelihood of involvement with child welfare services^{37,38}. In New Zealand, Māori whānau are disproportionately affected by family violence^{3,35,39,40}. Rouland et al.⁴⁰ found income did not protect Māori children notified to and placed in out of home care for child maltreatment. Other risk factors include alcohol and illicit drug use, younger maternal age, fewer years of education, history of criminal offending, and more changes in the child's primary caregiver^{35,39}. Māori whānau exposed to family violence often have all these risk factors, and while adjusting for these factors in analyses significantly reduces the relationship between ethnicity and family violence it is not eliminated³⁹. The social and cultural influences on violence in Māori whānau are discussed further in section 6 of this review.

11.2 What is the prevalence of family violence in New Zealand during pregnancy and childhood?

The exact prevalence of family violence is difficult to estimate, as family violence definitions and information sources vary substantially. Under-reporting and non-disclosure further impede establishing family violence prevalence. We do know 55% of women (ever partnered) reported IPV in their lifetime, with 33% experiencing more than one type of IPV⁴¹. In 2016, there were 118,910 family violence investigations by NZ Police, and 41% of frontline Police time is spent responding to family violence incidents⁴². Between the introduction of legislation criminalizing strangulation in December 2018, as of November 2019, over 1600 charges have been filed and Police charge on average 33 people a week for strangling or suffocating their partners (Inspector F. de Bes, National Prevention Centre, Personal communication, November 25, 2019).

Even when directly asked, many women choose not to disclose violence for a variety of reasons,⁴³⁻⁴⁷ such as:

- fear their children will be taken by child protective services;
- fear the consequences of disclosure from either the perpetrator or their community;
- their abuse is normalized;
- feel they are to blame;
- protecting their partner from potential arrest;
- Or they will not get the help needed or it is unavailable.

Further language, cultural, and social barriers to disclosure also exist for women who want to seek help^{43,44}. Similarly, only a third of adults reported they disclosed abuse as children at the time it occurred⁴⁸.

11.2.1 Prevalence of CAN

Hospital admissions and deaths

Fifty-six children in New Zealand died in family violence events between 2009 and 2015³. Of these children, 80% were younger than five years of age, and two-thirds of these deaths resulted from fatal physical abuse and/or grossly negligent treatment. Notably, 74% of offenders were male and the majority were known to the police for abusing the mother of the deceased child or another female partner³. Children (n=114) lived in households where another child died as a result of family violence³.

In 2015, 63 children aged <16 years were hospitalised with injuries inflicted by a family member⁴². Between the 1990s and 2000s, referrals for children with abuse-related traumatic head injury increased almost threefold, from 88 cases to 257⁴⁹. While the total number of traumatic head injuries from any cause (abusive and non-abusive) remained stable, non-accidental injuries accounted for 23% of fatal head injuries⁵⁰. Most hospitalisations were for children under two years of age, but mortality was higher for those who were three years or older^{49,50}. Most children aged under two years hospitalised with abusive head trauma had no known history of abuse⁴⁹, meaning that first instances are very severe or that oftentimes abuse goes undetected until it is severe.

Notifications to child protective services (Oranga Tamariki)

Based on the number of notifications to the police or Oranga Tamariki, one in four (23.5%) New Zealand children born between 1998 and 2015 were a notification of concern within the first full 17 years of their life³⁸, while 9.7% of children were substantiated as victims of abuse or neglect³⁸. Though these data indicate CAN is common in New Zealand, they describe a specific subset of children whose abuse is detected and substantiated through a child and family assessment or investigation by Oranga Tamariki and New Zealand Police. When abuse is not suspected to be severe, families may not undergo this assessment¹⁹. Report volumes are also subject to changes in awareness and policy and to systemic biases^{36,40}. Therefore, the underestimation of the number of children subject to CAN is likely.

Data from longitudinal studies

Longitudinal studies provide prospective data about family violence. It is important to separate prospective from retrospective measures of childhood maltreatment as there is disagreement between the two approaches⁵¹. The measures used differ considerably, as retrospective measures tend to be self-reported, whereas prospective measures are often based on observation or parental report⁵¹. Prospective measures are typically considered more accurate as they have the potential to identify behaviours that an infant or child may not understand or remember to be abuse or neglect. However, prospective studies can still be subject to desirability biases and have less specificity than retrospective measures⁵¹.

Participants in the Dunedin Multidisciplinary Health and Development Study (14%) retrospectively reported they experienced sexual abuse as children, although the perpetrator was not necessarily a family member³⁹. Women reported sexual abuse in childhood three times more than men⁵². More than three-quarters of participants regularly received physical punishment, but only 4.5% experienced harsh or abusive punishment³⁹. Harsh and abusive punishment was less commonly reported by participants in the Christchurch Health and Development study, affecting only 2%. However, over a third of participants who reported 'regular physical punishment' had an injury⁵³.

11.3 Prevalence of IPV

Between 2009 and 2015, for most of the 92 IPV deaths, men were the predominate abuser of their female partner³.

Population prevalence

The Violence Against Women Survey randomly sampled 2855 ever-partnered women living in Auckland and North Waikato households using a questionnaire based on a similar World Health Organization Multi-Country Study survey conducted internationally⁵⁴. IPV is common in these regions, with 33% of Auckland and 39% of North Waikato participants reporting lifetime physical or sexual IPV. Nearly a fifth

of Auckland and a quarter of North Waikato respondents experienced severe physical IPV, and 5% of participants overall had experienced IPV in the previous 12 months with 55% experiencing at least one form of violence^{41,54}.

Prevalence of IPV in pregnancy

The Violence Against Women Survey indicated 6% of Auckland and 9% of rural women experienced physical violence while they were pregnant, and almost half had been kicked or punched in the abdomen during a violent episode⁵⁵. This is considerably higher than the approximately 2% of women in Australia and Denmark who reported being victims of physical IPV during pregnancy⁵⁶. For the majority of women, the perpetrator was the father of the unborn child, and 25% of women experienced IPV for the first time during pregnancy⁵⁵. For most of those who had previously experienced physical violence, the violence was similar to or worse than previous violence. Although, 26% of women reported their partner was less violent during pregnancy⁵⁵.

Prevalence of children exposed to IPV

In addition to an increased risk for abuse, children whose caregivers are in abusive relationships live in a fearful environment and may have complex and dysfunctional relationships with other household members⁵⁷. Of the adults involved in IPV death events between 2009 and 2015, 92% had children. A total of 254 children lost a parent to an IPV death, while 65 children witnessed the death of a family member³. Almost all women who screened positive for IPV in a Māori health provider clinic had one or more children living with them⁵⁸.

The Dunedin Multidisciplinary Health and Development Study reported 24% of adults witnessed violence or threats between their parents while growing up⁵⁹. Of these, 9% of participants witnessed infrequent assaults between parents and 10% reported witnessing physical violence between their parents on at least five occasions. Fathers were most likely to be the offenders, although 28% of participants reported that both parents were violent towards each other, and 16% reported their mother perpetrated the violence⁵⁹.

In the Growing Up in New Zealand study (n=>6000), mothers reported 62% of children witnessed some form of conflict (including arguments) between their parents at four years of age, but exposure to regular or severe conflict was rare⁶⁰. Four percent of children were reported to ever witness physical conflict between parents, and 2% were usually present when their mother was insulted or threatened by her partner⁶⁰.

The Youth 2000 series surveyed secondary school students in 2001, 2007 and 2012, found almost 60% of students witnessed emotional violence, and in 2012 16% witnessed physical violence, a significant reduction from the 19% reported in the 2007 survey³⁶. These higher numbers potentially reflect the capacity of the older age of the young people to report violence, and because they may witness more violence than their parents report.

Inequities in the prevalence of family violence

Stark disparities exist in family violence in New Zealand, with Māori, Pacific families, and those living in neighbourhoods with high levels of deprivation bearing the burden of family violence. Historical, political, and social forces contribute to multiple social, economic and health inequities for Māori and Pacific families in New Zealand. While disparities shine a light on two population groups, what is less obvious is complex and intersecting relationships between:

- ongoing effects of colonisation and historical trauma for Māori and subsequent social, political and economic disenfranchisement⁶¹.
- long histories of immigration, generational immigration differences, and settlement of Pacific peoples within New Zealand, and during the 1990s economic reforms loss of employment leading to high levels of unemployment and social disadvantage; and
- higher experiences of adversity and poverty.

Moreover, social frameworks rooted in a racist, Western neo-liberal or exclusionary ideology⁶² further contribute to disparities in family violence.

While Māori made up 15% of the total population between 2009 and 2015 and 25% were aged under 19 years, they comprised 50% of CAN deaths and 44% of CAN offenders. Between 2009 and 2015, compared to non-Māori children, Māori children aged 0-4 years were four times more likely to die from CAN. Intentional injury comprises 28.7% of deaths and is the second-highest cause of death in Māori children and adolescents, although not all are family violence deaths⁶³. One study suggests higher rates of preventable blindness in Māori children can be explained by higher rates of severe non-accidental injury⁶⁴.

Māori ethnicity and deprivation combined predicts victims and offenders of family violence deaths (rather than ethnicity alone)³. Less than half of non-Māori women who died in an IPV event lived in neighbourhoods in the highest deprivation quintile, compared to 77% of Māori women³.

Of the Māori participants in the Dunedin Multidisciplinary Health and Development Study, 14% were exposed to harsh or abusive punishment, almost three times more than non-Māori participants³⁹. A cohort study of children born in 1998 found 42.2% of Māori children were notified to child protective services, compared to 27.2% of Pacific children and only 17.4% of New Zealand European children⁴⁰. Compared to New Zealand European children, Māori children were more than three times likely to have abuse substantiated (6.3% vs 20.4%, respectively), and placed in care (2.0% vs 7.1%). Although other data sources confirm that Māori children are at greater risk for family violence, this research suggests increased surveillance of Māori families⁴⁰.

The Violence Against Women survey demonstrated ethnic differences in lifetime prevalence of physical and/or sexual violence: 57.6% of Māori, 32.4% of Pacific, 34.3% of European/other, and 11.5% of Asian⁶⁵. Māori women were more likely to have been recently affected by violence, three times as likely to be physically assaulted while pregnant, and six times more likely to be hospitalised as a result of assault or attempted homicide compared to non-Māori New Zealanders, indicating the likelihood of severe violence¹⁸.

The repeal of section 59 of the Crimes Act enacted in 2007 (removed the legal defence for “use of reasonable force” parents charged with assault of a child), was associated with changes in public attitudes toward physical punishment of children⁶⁶. In 2007, more than 75% of four-year-old Pacific children were smacked regularly by either parent and around a quarter regularly hit with an object by their mother, although 17.3% were smacked and 2.4% were hit with an object. Fathers tended to use harsher punishment on children aged 1 to 2 years than mothers, with 13.2% of fathers of two-year-olds regularly punishing their child by hitting them with an object⁶⁷. In 2011, the Pacific Island Families Study reported physical punishment was a common element of parenting in Pacific families, with 81.7% of two-year-olds receiving a smack at least sometimes as part of regular discipline⁶⁸.

Pacific cultural norms around raising children and the role of biblical teachings shed light on discipline and violence. For instance, from a Samoan perspective, responsible parenting is about raising 'good citizens' who are respectful and dutiful. Therefore, educating children on appropriate behaviour may involve physical discipline, something that is influenced by biblical teachings. Poorly behaved children are a reflection on their parents and their quality of parenting⁶⁹.

The Pacific Island Families Study found 77% of Pacific mothers experienced verbal aggression from their partner, and 23.2% experienced physical violence, and almost half had experienced severe violence (48%)⁷⁰. Pacific mothers self-reported severe IPV that increased over time: 10.1% of mothers when their child was six weeks old, and 14.2% when the child was two years of age⁶⁸. The Youth 2000 survey series of secondary school students reported Pacific Island students were less likely than Māori or European students to report emotional abuse between their parents, but almost twice as likely as Māori students to report physical IPV³⁶. Poor food security was also associated with witnessing physical IPV and with Pacific ethnicity, suggesting adversity may play a role in strained relationships that lead to aggression³⁶.

11.3 Summary

- *Family violence is common in New Zealand, although the prevalence is difficult to accurately estimate due to heterogeneous and limited data and underreporting.*
 - *One in four New Zealand children are likely to be reported to Oranga Tamariki before 18 years of age due to concerns about their safety or wellbeing, but this is almost one in two for Māori children.*
 - *A third of New Zealand women experience physical or sexual violence from an intimate partner in their lives.*
 - *More than half of children may witness emotional violence between their caregivers, and 15-20% witness physical violence at home.*
 - *Māori and Pacific whānau are disproportionately burdened with family violence, associated homicide, and involvement with child protection services.*
-

11.4 What suitable tests are available and when is the optimal time to screen for family violence?

There are several terms used for screening family violence: screening, routine screening and routine enquiry. Screening describes to the universal assessment of whole population groups, while routine enquiry is similar to screening it refers to the routinely asking women about IPV in the healthcare setting without applying public health criteria for screening programmes⁷¹. In New Zealand, the latest guidelines for family violence assessment intervention has shifted terminology from screening to routine enquiry⁵.

While several experts and medical associations recommend screening for family violence⁷²⁻⁷⁴, it is not universally believed to be of value. The World Health Organization⁷¹ recommends against screening unless conditions such as mental health, substance use, unexplained health conditions and traumatic caused or complicated by IPV are present because insufficient evidence to suggest screening results in a reduction of family violence for those screened, and lack of availability of appropriate interventions. Although, the WHO does recommend antenatal care as an opportunity for screening to take place. Limited evidence is available, and randomised controlled trials have failed to demonstrate screening

and provision of a brief family violence resource has a benefit on quality of life, IPV exposure, or hospitalisation and emergency department visits after a three month to three year follow-up⁷⁵⁻⁷⁷. Such research cannot provide any information about the efficacy of screening for women who experience abuse but do not disclose it, nor consider women's subjective reports that screening is of value and provided relief and comfort⁷⁸.

Screening and providing information for Australian women improved their knowledge and attitudes around IPV, with 34% reporting positive benefits of screening that helped them to evaluate their situation and feel less isolated⁷⁹. The value of screening depends on follow-up with effective intervention. Screening presents an opportunity to create a safe space for a person to discuss IPV and to receive information, whether they disclose abuse or not. This may have immediate positive effects or be of value in the future if they experience abuse, can draw on information provided, or ask for help⁷⁸.

11.4.1 Timing of screening

We are not aware of any empirical evidence about the optimal timing for screening, but in general, interventions provide the greatest benefits when they are applied early⁸⁰. Healthcare engagement provides an opportunity for screening for family violence, especially in antenatal settings⁸¹. In general, women who have experienced moderate or severe IPV are more likely to have recently visited their GP or pharmacist, providing further opportunities to screen⁵⁴.

The antenatal period may be an important time to enquire about family violence, because it is a time of increased contact with healthcare services and increased risk for IPV²⁶. This time provides an opportunity for intervention before a child is brought into an environment of family violence. Suicide is the leading cause of death for New Zealand women during pregnancy or during the six weeks following pregnancy⁸². Family violence was known to be experienced by 73% of Māori maternal suicides between 2006 and 2015⁸³. A Cochrane review suggests that universal screening in healthcare settings using validated screening tools improves identification of women experiencing IPV but still does not identify as many women that experience IPV based on prevalence estimates¹⁶.

11.5 What screening takes place in practice?

11.5.1 Routine screening for IPV

The Ministry of Health recommends routine enquiry about IPV should occur for all females aged 16 years and over at any hospital admission or discharge, emergency department visit, mental or sexual health appointments, during prenatal and postpartum care, and at least annually in primary care settings. Males should be questioned about IPV if they have signs or symptoms of abuse⁵. There are limited published data to ascertain who is screened for family violence and the frequency of screening.

Data from the Perinatal and Maternal Mortality Review Committee indicates an increase occurred in antenatal screening for IPV between 2014-2015 for the first time. IPV status was known for 51.0% of women whose babies died as neonates in 2014 and for 64.2% of women in 2015. Overall, 2.4% of women were known to be experiencing IPV in 2014 (4.7% of those screened), and 4.3% in 2015 (6.7% of those screened)⁸³.

11.5.2 Screening for family violence at well-child checks

The Well Child/Tamariki Ora (WCTO) programme provides health assessments, referrals, and support services to children and their families from birth to 5 years⁸⁴. The schedule indicates that a family violence assessment should be carried out at 11 visits, beginning within 48 hours of the child's birth (Table 11.2).

Table 11.2. Schedule of Well Child/Tamariki Ora visits that include a family violence assessment

Child age	The usual person undertaking the assessment
Within 48 hours of the child's birth	Lead maternity carer
Up to one week from the child's birth	Lead maternity carer
2-6 weeks	Lead maternity carer
4-6 weeks	Any well-child provider
8-10 weeks	Any well-child provider
3-4 months	Any well-child provider
5-7 months	Any well-child provider
9-12 months	Any well-child provider
15-18 months	Any well-child provider
2-3 years	Any well-child provider
4 years (B4 School Check)	

From the Ministry of Health's Well Child/Tamariki Ora National Schedule 2013⁸⁴.

The WCTO practitioner handbook recommends against routine enquiry about child abuse and neglect. Instead, practitioners are instructed to be attentive to interactions between the caregiver and child to detect signs of possible abuse. However, many of the signs listed in the handbook are not relevant for pre-verbal children, so may be limited to detect early abuse⁸⁵. Furthermore, the assessment of CAN is largely subjective and prone to error or unsubstantiated judgment.

Though the Ministry of Health does not recommend a specific screening tool⁵, instructions for enquiring about IPV at well-child checks include examples of specific, direct, and clear questions about different types of IPV and a women's feelings of safety and fear (Figure 11.2)⁸⁵. However, it is unclear what screening takes place in practice. Our search did not reveal recently published data about how many families are screened at each visit, although screening at well-child checks is historically low, particularly beyond the first core visit at 2-5 weeks⁸⁶. Data from Plunket visits in 2005 indicated that 64% of women were screened in the first visit (2-5 weeks), 18% at 6-9 weeks and fewer than 5% of women were screened at any further visits, with no women screened more than once⁸⁶. Repeat screening may be important for detecting abuse. The likelihood of disclosure may increase as a woman's relationship with the well-child provider develops, and because the dynamic nature of abuse, risk can change quickly over time⁸⁶. Equally importantly, the manner in which the assessment is undertaken greatly influences the likelihood of disclosure of abuse⁸⁷.

Questions about physical violence

- Within the past year have you been hit, pushed/shoved, slapped, kicked, choked or otherwise physically hurt? (If so, who did this to you?)

Questions about sexual violence

- Within the past year have you been forced to have sexual activities against your will? (If so, who did this to you?)
- Have you been made to do anything sexual at a time or place, or in a way that you did not want to?

Questions about psychological/emotional violence

- Within the past year, did anyone insult or swear at you? (If so, who did this to you?)

Questions about stalking/other feelings of not being safe

- Is there a current or past partner who is making you feel unsafe?
- Are you afraid of what your current (or ex-) partner might do to you or someone else?

Figure 11.2. Recommended questions for enquiring about intimate partner violence at Well Child/Tamariki Ora visits. Reproduced from the Ministry of Health's *Well Child/Tamariki Ora Programme Practitioner Handbook: supporting families and whānau to promote their child's health and development*⁸⁵.

11.5.3 Barriers to screening and disclosure

Aside from the myriad factors outside of a screening setting influencing a woman's decision to disclose abuse, many barriers exist to screening being undertaken or being an acceptable opportunity for disclosure.

A systematic review cited common barriers to screening for healthcare providers were personal discomfort asking the questions, time constraints, and lack of knowledge or training about IPV⁸⁸. Newly trained nurses were influenced by senior staff who documented they had completed an IPV screen but had not undertaken the screen⁸⁹. It was commonly believed that universal screening was not necessary because women who needed to be screened could be identified, despite no evidence supporting such practice⁸⁹.

Plunket well child providers cited privacy, time constraints and personal fears of overstepping their perceived role as a visitor in their clients' homes as key barriers to screening during well-child checks. Some Plunket providers intentionally screened in a way that fulfilled their obligation to enquire about family violence while reducing the likelihood of needing to deal with a positive response, because they felt underprepared to respond⁸⁶. Two of four women who shared their experiences of IPV screening by Plunket providers were unaware screening had taken place, reinforcing the importance of enquiring directly and clearly about abuse⁸⁶. Asking the single question "Are you safe at home?" was reported to have very low sensitivity for identifying women experiencing IPV (8.8%)⁸⁷. Unless asked directly, most women agreed they would not disclose abuse⁴⁵. Further, the use of standardised questions (rather than relying on the practitioners' questioning styles and preferences) improved the practitioner's perceived readiness to ask about IPV and reduced fear of offending the patient⁹⁰.

Although healthcare workers report reluctance to screen for IPV due to the invasiveness of asking about relationship violence and their own discomfort^{86,88,89}, the majority of women are happy to be asked about IPV, including Māori and other New Zealand women^{78,91}. In one study only 3% of women found

the questions to be unacceptable, whether women had or had not experienced IPV themselves⁹¹. However, women who support screening may still choose not to disclose abuse⁴⁵.

Whether women have or have not experienced IPV, they prefer that healthcare providers to explain to women why they are asking about partner violence, and to create an atmosphere of safety, support and privacy^{86,92}. Women also indicated practitioners should show they actually care about the women and her safety, and take their time asking such sensitive questions^{45,92}. These factors improve the likelihood of disclosure⁴⁵. Some women suggested that posters, information cards and pamphlets about IPV could also provide an anonymous way for them to access help when they are unable or unwilling to disclose their abuse⁹². Many women who had experienced IPV thought that providing information to all women, regardless of whether she disclosed abuse, was a good idea⁹². Other factors likely to influence a woman's decision to disclose IPV is her perception of safety from institutional control, the abuser, and shame perspectives⁴⁵. Women who disclose abuse grapple with real, complex, and sometimes systemic barriers and issues⁹³.

11.5.4 Screening tools that have been evaluated/validated

Calculating predictive validity for family violence screening tools is difficult because a person's real-life exposure to family violence is often unknown. Screening tools are therefore often validated in comparison to other screening tools or questionnaires intended for research settings. Therefore, the exact sensitivity and specificity for identifying cases of those experiencing family violence are unknown.

Screening for IPV

Our search did not identify any IPV screening tools intended for general populations validated with New Zealand populations. Table 3 provides examples of common screening tools intended for use with a general (or healthcare) population to identify women experiencing IPV with available specificity and sensitivity data. Most screening tools either favour specificity at the expense of sensitivity or vice versa⁸⁷. The HITS demonstrated high sensitivity and specificity for identifying women who had already disclosed they were victims of IPV but did not report sensitivity and specificity for identifying IPV victims in a general population⁹⁴. The HARK screening tool, while showing promising specificity and sensitivity, is plagued by a reduced external validity because of a 54% response rate, and concerns about the inability to confirm false positives for those women who screened positive on the HARK but negative on the CAS⁹⁵. The vast difference in reported specificity and sensitivity between two studies evaluating the Abuse Assessment Screen (AAS)^{96,97} demonstrates the importance of assessing a tool in a specific population as well as the manner of its intended use. A Cochrane review suggested that women may be more likely to disclose family violence if screening was on paper or a computer, rather than a face-to-face interview¹⁶.

Table 11.3. Sensitivity and specificity of selected screening tools for IPV

Screen name	Screen description	Validation study	Sensitivity and specificity	Comparison measure
HARK	Four-item screen (face-to-face interview)	Sohal 2007 ⁹⁵ UK n= 232 women in GP office	Sensitivity = 81%, specificity = 95% with cut-off score of 1	Compared to CAS
AAS	Five-item screen – 'ever' or 'within the last year' (pen-and-paper questionnaire)	Weiss 2003 ⁹⁶ USA n=856 men and women in emergency department	Sensitivity = 93%, specificity = 55% with cut-off score of 1	Compared to ISA

Screen name	Screen description	Validation study	Sensitivity and specificity	Comparison measure
	Three-item screen (face-to-face interview)	Reichenheim 2004 ⁹⁷ Brazil n=748 women post-delivery in maternity wards	Sensitivity 31.9% (95% CI 24.9 to 40.3) for minor and 61.4% (95% CI 47.6 to 74.0) for severe physical violence, Specificity ≥97% Using only the pregnancy question	Compared to CTS2
OAS	Five-item screen (one pregnancy-specific) – ‘presently experiencing (pen-and-paper questionnaire)	⁹⁶ USA n=856 men and women in emergency department	Sensitivity = 60%, specificity = 90% with cut-off score of 1	Compared to ISA
HITS	Four-item screen with 5-point scale for frequency (pen-and-paper questionnaire)	⁹⁴ USA n= 160 female family practice patients, 99 women from domestic violence crisis shelters or who self-identified as victim of domestic violence at emergency department presentation	Sensitivity = 96% Specificity = 91.2% With cut-off score of 10.5	Self-identification

HARK: Humiliated, Afraid, Rape, Kick. CAS: Composite Abuse Scale. AAS: Abuse Assessment Screen. ISA: Index of Spouse Abuse. CTS2 – Revised Conflict Tactics Scale. HITS: Hurts, Insults, Threatens, Screams.

Screening for CAN

The Ministry of Health’s recommendation against routine enquiry about child abuse and neglect⁸⁵ is based on evidence that screening results in a high number of false positives, and therefore, is likely to do more harm than good⁹⁸. Nevertheless, given the prevalence and seriousness of CAN and false disclosures attention should be paid to the signs of non-accidental injury, abuse and neglect. The review upon which this recommendation is based does not include any research published in the last 20 years. Our literature search did not find any many recently developed screening tools intended for universal screening in a well-child setting.

The majority of screening tools that have been developed to identify CAN are intended to identify non-accidental injury in children presenting to healthcare settings with traumatic injury or other injury or illness⁹⁹⁻¹⁰¹. One screening tool based on the Child Abuse Potential Inventory (CAPI), the Brief CAPI (BCAPI)¹⁰², was validated in Finland^{103,104} and Germany¹⁰⁵. The BCAPI was considered to have the potential for screening in these populations, with the caveat that cut-off points were likely to be different. However, this screen is not intended to identify children subjected to maltreatment, but to identify families with high risk for CAN, based on known risk factors. The inventory did not consistently relate to the likelihood of notifications to child protective services¹⁰². Further, while intended to be brief, the BCAPI includes 33 questions and a complex scoring system¹⁰². Published data do not seem to clarify whether the BCAPI is likely to have a high false-positive rate.

11.5.5 Other important considerations for screening

Though this section has focussed primarily on screening for victims of family violence, known risk factors for being a perpetrator of abuse could be identified and potentially managed in a primary care setting. Mental health problems, particularly when untreated, problem drinking, and substance use are factors identified as leading to violence for perpetrators of family violence in New Zealand^{33,106}. Family violence prevention should include the screening and provision of support for those with mental health and

substance use problems and the caregivers of children. New Zealand parents recently discharged for treatment of serious mental illness or substance use disorders were less likely to have committed violence against their children than a comparison group from the general community, according to both self- and informant-report¹⁰⁷. However, the authors of this research were unable to compare these parents to parents with untreated disorders.

Most interventions are ones implemented in other countries, and their suitability in terms of the New Zealand population and context, particularly with regards to culture and language has not been well established. This is particularly important to note for Māori and Pacific populations whose contexts have added layers of complexity that include their unique historical contexts and the roles of colonisation and immigration. Therefore, consideration should be given to implementing screening tools and interventions with care and the notion of developing specific interventions that are culturally relevant and meaningful to these population groups.

11.5 Summary

- *Despite poor evidence that screening results in reductions in family violence, it provides valuable opportunities for education and intervention, and may benefit women who choose not to disclose abuse.*
 - *Screening allows for early support provision or intervention.*
 - *The Ministry of Health recommends regular, routine enquiry for family violence during healthcare interactions with women and well-child checks, but it is unclear what screening takes place in practice.*
 - ¶ *There are many barriers that may prevent screening from taking place at recommended time points.*
 - *Direct questioning and feeling safe are important factors that encourage a woman to disclose IPV.*
 - *As far as we are aware, no universal screening tools for IPV or CAN have been validated in New Zealand populations; testing of validated screening tools within NZ and ethnic settings is required.*
 - *Screening for family violence should include management of associated issues (e.g. mental health problems, substance use disorders)*
-

11.6 What interventions or additional support for family violence is effective following detection? Is it currently well implemented in NZ? Does early intervention lead to significant improvements later in childhood/adolescence?

This section focuses on interventions that may be offered to families following the detection of family violence. Therefore, primary preventive approaches are beyond the scope of this review. In New Zealand, if child abuse or neglect is suspected, Oranga Tamariki or Police should be notified, who will carry out their own risk assessment. Interventions for family violence are not easily evaluated using traditional RCT studies and are often evaluated in comparison to a control group already receiving some support services. Few studies measure long-term outcomes of interventions – these are reported where available. Most interventions are multi-faceted due to the complexity of family violence and its wide-reaching consequences, which means that it is difficult to identify exactly what parts of an intervention approach may be contributing to positive outcomes. However, a recent systematic review identified

that the interventions most likely to be successful tended to include (a) ongoing support services in the form of counselling, home visits, and parenting support; and (b) addressing multiple risk factors rather than family violence in isolation⁷⁴.

11.6.1 Interventions during pregnancy

Early intervention is optimal for reducing suffering and preventing risk to a child's development⁸⁰. However, a Cochrane review found insufficient evidence that interventions aiming to prevent or reduce episodes of family violence during pregnancy are effective¹⁰⁸. Only one trial included in the review reported a significant reduction in episodes of IPV¹⁰⁸. This intervention targeted English-speaking women living in Washington, D.C. who self-identified as being of minority ethnicity. Women randomised to the intervention received an individualised series of psycho-behavioural counselling sessions at antenatal care visits, which included information about types of abuse, safety behaviours and safety plans, as well as a list of community resources¹⁰⁹. Women receiving the intervention were about half as likely to experience minor, severe, or any physical IPV postpartum, although there was no difference in the likelihood of sexual violence between groups¹⁰⁹. Other interventions with counselling components, though not necessarily effective in reducing domestic violence, exert positive effects by improving women's coping strategies, stress levels, safety, and health^{108,110}.

Advocacy interventions aim to empower women to set their own goals for managing IPV by improving their understanding of their situation and possible solutions may be successful in antenatal settings according to a second Cochrane¹¹¹. The DOVE intervention was incorporated into existing home visiting programmes for women who had experienced IPV during or in the year leading up to pregnancy¹¹². The brochure-based, structured empowerment intervention comprised three antenatal and three postpartum sessions, delivered by nurses and nurse-supervised community health workers. The brochure contained information addressing the cycle of violence, the Danger Assessment (which assesses risk for homicide), choices available, safety planning information tailored to the context and level of danger, and IPV resources specific to the community along with national hotline information¹¹². A control group received home visits without the DOVE intervention component and was screened and given basic referral information for IPV. Although there was no significant difference in IPV experience between the DOVE and control groups at the 24-month follow up, both groups had a significant decrease in IPV experience, which was greater for the DOVE group¹¹².

11.6.2 Other home visiting interventions

Home visiting interventions vary in method and content, and are flexible to respond to the needs of those receiving them. They typically target vulnerable families and provide support for relationships, substance use problems, mental health problems, employment, and education^{112,113}. A 'screen and refer' approach to addressing maternal depression, substance use, and IPV in home visiting was found to increase the likelihood of discussion about these issues, but not the likelihood of identification of IPV or referral of women experiencing them¹¹⁴. A recent systematic review reported home visiting programmes could not be recommended to reduce the occurrence of child maltreatment limited because of contradictory evidence¹¹³. However, because these interventions are typically designed to be culturally appropriate to the community they intend to serve there was significant heterogeneity between programmes examined¹¹³. Importantly, the New Zealand-based Early Start programme reported improved outcomes for children, though it did not appear to reduce the occurrence of IPV in enrolled families¹¹⁵.

Early Start was based in Christchurch for families with a new infant and facing stress and difficulty. Families received weekly-to-monthly visits depending on their needs until their child was five years old¹¹⁶. Of the children enrolled in Early Start, 43% were identified to be at high risk for maltreatment according to a population-based prediction model, reflecting the high support needs of the population the programme targeted¹¹⁷. The 443 families randomised to Early Start or a control condition had high levels of inter-partner conflict and violence that did not improve with programme participation¹¹⁶. However, at 36 months, children in Early Start had lower rates of severe or very severe physical assault by parents, reduced exposure to punitive parenting in favour of positive parenting styles, and lower rates of internalising and externalising behavioural problems. They were also less likely to have visited a hospital for accident, injury or poisoning and were more likely to attend well-child and GP check-ups. The effects of fewer injuries requiring hospital visits, less physical or harsh punishment, and improved parenting competence persisted at the nine-year follow-up¹¹⁵. Importantly, there was a trend towards stronger effects of the intervention for Māori families and those facing multiple disadvantages, although the trend did not reach statistical significance^{116,118}. Notably, just over a quarter of eligible families declined to participate, so while home visiting may offer an alternative intervention pathway for families with children at risk for CAN, it may not be suitable for all families¹¹⁵.

Family Start is another intensive home visiting programme, originally based on Early Start, that serves the Manukau and Franklin areas¹¹⁹. It is delivered by Māori, Pacific, faith-based, and other service providers to families before or shortly after the birth of a child in a manner that is culturally responsive to the communities they serve. Unlike Early Start, it has not been systematically evaluated using an RCT study design, but families receiving the intervention appear to have higher vaccination rates, higher engagement with early childhood education, and a small reduction in risk of post-neonatal deaths, including injury deaths and SUDI¹¹⁹. The programme continues to evolve but it is unclear whether it reduces family violence.

11.6.3 Parenting programmes

A review of treatment interventions found child-parent interventions are effective where mothers with IPV and their children undergo interventions both separately and jointly have positive psychosocial recovery and improved wellbeing¹²⁰.

The Incredible Years Parenting programme is an evidence-based intervention for addressing conduct problems in children aged three to eight years that have demonstrated improvements in child behaviour, parenting, and family relationships in New Zealand¹²¹. The programme is available to all families receiving Family Start home visits. Parents who completed the 14 group sessions reported significant improvements in child behaviour, and that programme participation resulted in a reduction in corporal punishment, hostile or over-reactive discipline, verbal aggression and physical assault towards children that persisted in the 30-month follow-up¹²¹. In addition to improvements to the parent-child relationship, there were modest improvements in the parental relationship, including a reduction in inter-parental violence¹²¹.

Ngā Tau Mīraho o Aotearoa is intended for Māori whānau and is an adaptation of the Incredible Years programme that incorporates Māori tikanga and cultural elements¹²². The programme demonstrated cost-effectiveness, with conservative estimates forecasting a return on investment ratio of 3.75:1. Most parents who completed the programme reported improved parenting skills, family relationships, and mental wellbeing; and that their children had improved emotional, cognitive and social functioning¹²². Further benefits came from feeling supported by other parents in the programme and by the kaiārahi (facilitators), who provided information about and assistance with accessing further support for their

individual needs. Kaiārahi themselves also experienced positive effects on their personal and professional development and their own parenting skills¹²².

The Triple P parenting programme has also demonstrated efficacy for reducing problem behaviours in children, though its effects on family relationships are less well-studied¹²³. Though course length and content vary, in general, they are of lower intensity than the Incredible Years intervention. The Primary Care Triple P-Discussion Groups, which involves two two-hour group sessions, has been adapted to be culturally consistent with Māori values¹²⁴. This adaptation was effective in improving child behaviour and reducing interparental conflict about child-rearing and was considered both culturally acceptable and valuable by participating parents¹²⁴.

Both the Incredible Years and Triple P have parenting programmes targeting children from birth, but their efficacy and effect on family violence have not been evaluated on a large scale in New Zealand for children younger than three years.

11.6.4 Interventions for perpetrators of abuse

The most widely used interventions for perpetrators of family violence are the Duluth model and cognitive behavioural therapy (CBT). The Duluth model focusses on changing patriarchal views that support violence towards women while providing education about alternative methods of conflict management and problem-solving to avoid the use of violence. CBT helps individuals to change harmful behaviours by identifying and addressing the disordered and biased ways of thinking that lead to the behaviours. A Cochrane meta-analysis demonstrated no clear effect of CBT on reducing reoccurrence of violent behaviour¹²⁵.

A systematic review of reviews also suggests there is no clear impact of either approach on recidivism, particularly when looking at victim reports compared to administrative data¹²⁶. Reoffending may be lower when the abuser is self-referred and higher if the program is not completed, suggesting that motivation for change may be an important moderator of the programmes' effects¹²⁶. Another systematic review of perpetrator programmes within the healthcare setting demonstrated weak evidence, although when combined with alcohol treatment authors indicated they could be promising¹²⁷. These findings must be considered within the complexity of interrelated factors that surrounds IPV contributing to perpetrators' behaviours – motivation to change, for instance, may only be one of several factors affecting an individual.

A review of IPV interventions for perpetrators (in addition to those for victims and children) found a lack of evidence for the effectiveness of interventions including the Duluth model and CBT. They noted significant attrition from these programmes, although noted the promise of motivational enhancement therapy (MET) used in substance abuse studies, by focusing on the parenting role, perpetrators attachment to their children and developing an awareness of the effect the violence has on their children¹²⁸. Another study found the use of motivational interviewing techniques in combination with CBT or other family violence reduction interventions improved the effectiveness of the interventions, particularly for offenders who were less motivated to change their behaviour. There was no clear effect on the likelihood of completing an intervention programme¹²⁹.

11.6.5 Whānau Ora and whānau-centred interventions for indigenous early childhood wellbeing

Whānau-centred (or family-centred) approaches to improving outcomes for children at risk provide support and care for the whole family and intend to be consistent with the viewpoints of indigenous cultures¹³⁰. Whānau Ora, a whānau-centred approach, empowers and supports whānau. Shaped by Māori values and culture it delivers support within Māori and other communities^{35,131}. Interventions operating within this framework improve attitudes towards, and actual, home safety, and reduce childhood injury and illness for indigenous children¹³⁰. A whānau-centred approach may be particularly important to address family violence, for those Māori whānau who are at risk for violence, and for those affected by family violence who want to keep their whānau together and safe, rather than separating the abuser(s) from the victim(s)¹³².

Te Manu Tu Tuia is a recently-developed Hawke's Bay-based initiative to address domestic violence informed by a whānau-centred approach and community voices¹³². It offers two-weekend wānanga (forum) for couples at high-risk who are both willing and motivated to make behavioural changes. In the first wānanga, couples attended group workshops, therapy sessions, and activity-based learning. The wānanga included couples' children, who participated in separate workshops on the first day and came together with their caregivers on the final day for whānau activities. For the 37 participating couples, the program significantly reduced reoffending behaviour and police callouts (estimated a 69% decrease in violence). Further, participants were almost six times more likely to be in employment a year after the programme than at the start of the programme. All couples had positive feedback and for some couples, the intervention was life-changing. All felt that it had reduced violence in their homes, and gave the tools to prevent, reduce, or de-escalate violence, and access further support¹³².

11.6.6 Implementation of family violence interventions in New Zealand

Protective interventions for victims of family violence are available in New Zealand through the justice and legal systems. However, the National Collective of Independent Women's Refuge estimates at least 80% of family violence incidents go unreported to the police. A lack of understanding of the dynamics of IPV by the general community and those interacting with women in or leaving an abusive relationship (e.g. WINZ, family court, social services) undermine policies and formal sanctions (e.g. protection orders)⁴³. Many women find legal sanctions to be ineffective, and child access by abusive fathers burdensome, particularly when it involves unwanted contact with her abuser, and having to leave children with fathers who lack the skills to safely care for them^{43,133}.

Applying for a protection order has been described as one of the most frightening experiences in an abused woman's life, and they are not often sought until being re-victimised multiple times¹³³. Still, around two out of five applications do not result in a protection order being granted¹³⁴. Many women do not know about or understand that they may benefit from a protection order until told by a lawyer or by police – who do not always have correct knowledge about who may access them¹³³. Many women describe a lack of faith in police to enforce protection orders due to previous negative experiences in family violence situations¹³³. Women can end up paying thousands of dollars in legal fees to access legal protections from their abuser¹³³.

11.6 Summary

- *Home visiting programmes have demonstrated long-lasting improvements in child safety in New Zealand. The inclusion of an advocacy/empowerment element may improve outcomes for women experiencing IPV.*
 - *The Incredible Years Parenting programme, which has been offered to at-risk families as part of Family Start, has positive effects on parenting and on family relationships.*
 - *Existing interventions targeting perpetrators of family violence depend on the perpetrator's motivation to change.*
 - *A Whānau Ora approach to addressing family violence appears to be an effective and empowering option for whānau who are ready to address violence in their homes.*
 - *Many women have negative experiences of accessing legal protections from perpetrators of family violence.*
-

11.7 Are there any known harms from screening for family violence?

A Cochrane review found no reports of adverse events as a result of screening for family violence. Instead, inquiring about family violence in healthcare settings was associated with increased patient satisfaction¹⁶. However, it should be acknowledged that for some women who have previously experienced IPV, screening can bring up painful memories, feelings of shame, and may make an already stressful healthcare visit worse⁷⁸. Six percent of women who screened positive for IPV in Australia reported feelings of sadness or depression after being prompted to think about their situation⁷⁹. These feelings are not universal, and women who experience them are not necessarily opposed to screening⁷⁸. The women's risk of emotional harm needs to be balanced the opportunity to talk about their IPV⁷⁸, and the potential screening offers for providing support and addressing family violence.

11.8 What do we know from a Māori and Pacific knowledge basis about screening in this domain?

11.8.1 Context of Māori family violence

Māori families are disproportionately affected by violence between family members. Despite normalisation of violence in some Māori families and suggestions that Māori is inherently violent, family violence is antithetical to Māori cultural values and tikanga (practices and protocols), and would not be tolerated in Māori society prior to colonisation⁶¹. Pre-colonisation, Māori culture valued children as active participants in all aspects of community life¹³⁵. Early European accounts documented an absence of violence and physical discipline in Māori domestic life and provide evidence of affection between adults and children^{135,136}. Raising and nurturing tamariki was a collective responsibility, shared between men and women of the wider family group, and did not depend on rigid Western nuclear family structures^{61,135}. Instead of coming from within Māori culture, the causes of violence are rooted in the intergenerational trauma experienced by Māori due to the historical subjugation and ongoing oppression as a result of colonisation¹³⁷.

The destabilisation of gender and power relationships Māori experienced with the loss of land, language and cultural expression resulting from colonisation was driven by Western ideologies of patriarchy and Christianity^{20,47}. The loss of the protections embedded in cultural values and practices left Māori susceptible to disparities, and to being both perpetrators and victims of violence. As with any family, growing up with violence increases the odds of a child growing up and becoming either a perpetrator or victim (or both) of family violence³². Intergenerational patterns of violence and harm increase the likelihood that children have limited opportunities to learn other ways of interacting. However, while a ‘cycle of abuse’ model is commonly used to explain violence in Māori whānau, not all Māori women, children and men affected by IPV and CAN (respectively) come from whānau with intergenerational family violence¹³⁵. Therefore, it is important to note that contemporary Māori are diverse in cultural and whānau backgrounds.

Though physical punishment of children is usually intended to teach a child right from wrong, it is often associated with frustration, anger, and alleviation of the stress of parenting¹³⁵. Physical punishment is seen to deter misbehaviour outside of the home, informed by the belief that if the parent is hard on the child it will make the child better able to deal with people that might pick on them¹³⁵. Some Māori caregivers described using physical punishment in order to make children conform to Pākehā ideals so that their children would not be the targets of racist stereotyping¹³⁵. They also seem to internalise Pākehā ideas that Māori are naturally violent, despite historical evidence suggesting the opposite^{47,135}.

In one study, the desire to protect children from the negative effects of IPV was the main motivation for Māori women leaving past abusive relationships⁴⁷. However, the fear that children will be removed from their care is a barrier for women to seek help. Women’s fears are compounded by frustrated people working within the system who are judgemental and racist and do not practically solve the problems they present with⁴⁷.

11.8.2 Context of Pacific family violence

Pacific peoples are diverse, coming from different island nations within the Pacific, meaning they have different cultural backgrounds. Samoan people value cultural traditions and norms that privilege individual’s responsibilities and obligations to their family contrasting with Western concepts of individuality and independence. This can lead to pressure on women to remain with abusive partners, which is both internal and external in origin – that is, from “churches, from the extended family ... or just from the community”⁴³. Thus, ideas of ‘good wife’ who obey their husbands mean women may be more likely to be met with resistance within the community in terms of leaving them⁶⁵.

Pacific Islanders living in Aotearoa are diverse within and between the various island nations, and do not have access to the same traditional supports that exist in the village structure that is common to their home islands¹³⁸. A collective social identity is common in Pacific cultures, which means that individual models of family and sexual violence have limited applicability to Pacific people¹³⁸. The possibility of social exclusion or family estrangement for disclosing is a particularly strong incentive to keep family violence secret for people with collective social identities⁴³.

11.8.3 Implications for screening

Common to many families, disclosure of abuse will be less likely for Māori whānau who believe it may lead to loss of their children to State care or disruption to their family structure. Some Māori women would prefer to be screened by a Māori woman using Māori processes and practices⁷⁸. In contrast, a Pacific woman preferred a Caucasian person interviewed her because it felt easier than discussing

physical violence with a Pacific person⁷⁸. The normalisation of physical violence is common in Pacific communities, as are perspectives that a woman who has been hit must have done something to deserve it^{43,65}. Pacific women are more likely to endorse ideas that it is “important for a man to show his wife who is the boss” and that family problems should be discussed only within the family⁶⁵, which may mean that they could benefit from provision of information about IPV even if they do not disclose abuse on screening.

11.8 Summary

- *We need to avoid putting Māori and Pacific together as their backgrounds and needs vary significantly, and similarly recognise the different Pacific nations that are sometimes seen as a homogenous group.*
 - *There is a lack of research about screening and interventions and what works for Māori and Pacific.*
 - *Aside from the Ngā Tau Mīraho o Aotearoa research recently published that focuses on the cost benefits of an adaption of the Incredible Years Programme.*
 - *Māori whānau are over-represented in the IPV and CAN statistics.*
 - *Pacific families are over-represented but the IPV and CAN status are less clear.*
-

11.9 Recommendations for future action

Policy and practice

- Explore ways to improve the routine enquiry about IPV with women during the antenatal and postnatal periods. Routine enquiry protocols exist, however, given the higher risks associated with pregnancy and following the birth of a baby for IPV these need to be better implemented.
- Significantly improve the collection of data (and make it available) by antenatal, primary health care and WCTO providers screening for IPV and follow-up referral and intervention.
- Include family violence as part of assessments for mental health and substance use disorders.
- Establish structured evaluation protocols and measures that aim to capture the efficacy of programmes, such as home visiting, the Incredible Years Parenting, Family Start, which are all promising interventions that appear to have positive effects on parenting and family relationships.
 - Design and implement a systematic evaluation programme examining interventions such as Whānau Ora and others adapted for use with Māori whānau and Pacific families.

Future research

- Undertake a programme of research that focuses on Well Child Tamariki Ora screening and interventions. Such a programme should include the following:
 - Exploration of the efficacy of face to face versus electronic versus paper-based methods of screening/routine enquiry and identify potential barriers to screening and routine enquiry.
 - Validation of routine enquiry/screening questions within the context of Aotearoa, and with targeted population groups such as Māori, Pacific, and other relevant population sub-groups.
- Undertake research with Māori and Pacific population groups that captures relevant and meaningful evidence to better inform screening and interventions. Note, these population groups should have separate programmes of research.
 - For Pacific populations, parenting interventions that are culturally appropriate should be a research priority.

11.10 Graded Evaluations

Table 11.4. Graded evaluation of screening tools and associated recommendations for policy and practice.

Screening tool	Grade	Estimated net benefit	Level of certainty	Recommendation
HARK	I	Insufficient	Low	May be applicable in some populations but needs further validation.
AAS	I	Insufficient	Low	May be applicable in some populations but reported validity varies considerably between studies.
OAS	C	Small	Low	May be applicable for evaluating ongoing IPV in some populations but reported sensitivity is low.
HITS	C	Small-moderate	Moderate	It could be offered to both women and men but has not been validated in NZ. Validation should also include ethnic populations.

Grade: A, B, C, D, or I.

Estimated net benefit: substantial, moderate, small, nil or harmful, or insufficient (evidence).

Level of certainty: high, moderate, or low.

For more detailed explanation see [Supplementary Information - Grade definitions and levels of certainty](#).

Table 11.5. Graded evaluation of interventions and associated recommendations for policy and practice.

Intervention	Grade	Estimated net benefit	Level of certainty	Recommendation
Psycho-behavioural counselling	C	Moderate	Moderate	This intervention could be offered as part of a comprehensive intervention for IPV.
Advocacy/empowerment interventions	C	Small-moderate	Moderate	This intervention could be provided to everybody who needs it.
Home visiting programmes	B	Moderate-substantial	Moderate	This intervention should be provided for every family who needs it. Content should be tailored to the family's needs.
Parenting programmes	B	Substantial	Moderate-high	This intervention should be provided for every family who needs it. Needs to be evaluated for children younger than three years. Content should be tailored to the family's needs, particularly Māori, Pacific, and other minority groups.
CBT/Duluth model therapy for perpetrators	C	Small	Moderate	This intervention could be provided for every person who is motivated to change their behaviour, or in combination with motivational interviewing.
Whānau Ora approaches	C	Substantial	Low-moderate	This intervention approach shows great potential, particularly for Māori whānau. Research is needed to systematically evaluate Whānau Ora interventions

Grade: A, B, C, D, or I.

Estimated net benefit: substantial, moderate, small, nil or harmful, or insufficient (evidence).

Level of certainty: high, moderate, or low.

For more detailed explanation see [Supplementary Information - Grade definitions and levels of certainty](#).

References

1. Fairhall R. *Review of family violence legislation: Regulatory impact statement*. 2017, Ministry of Justice: <https://www.justice.govt.nz/>.
2. Kahui S, Snively S. *Measuring the Economic Costs of Child Abuse and Intimate Partner Violence to New Zealand*. 2014, The Glenn Inquiry: Wellington, N.Z.
3. Family Violence Death Review Committee. *Fifth Report Data: January 2009 to December 2015*. 2017, Family Violence Death Review Committee: Wellington.
4. World Health Organization. *INSPIRE: Seven Strategies for Ending Violence Against Children*. 2016, World Health Organization: Geneva.
5. Fanslow JL, Kelly P, Ministry of Health. *Family Violence Assessment and Intervention Guideline: Child abuse and intimate partner violence (2nd edn)*. 2016, Ministry of Health: Wellington.
6. Anda RF, Felitti VJ, Bremner JD, Walker JD, Whitfield C, Perry BD, Dube SR, Giles WH. The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience* 2006;256:174-186.
7. Brown DW, Anda RF, Tiemeier H, Felitti VJ, Edwards VJ, Croft JB, Giles WH. Adverse childhood experiences and the risk of premature mortality. *American Journal of Preventive Medicine* 2009;37:389-396.
8. Bryan RH. Getting to why: Adverse childhood experiences' impact on adult health. *The Journal for Nurse Practitioners* 2019;15:153-157.e151.
9. van Toledo A, Seymour F. Caregiver needs following disclosure of child sexual abuse. *Journal of Child Sexual Abuse* 2016;25:403-414.
10. Odgers CL, Moffitt TE, Broadbent JM, Dickson N, Hancox RJ, Harrington H, Poulton R, Sears MR, Thomson WM, Caspi A. Female and male antisocial trajectories: from Childhood origins to adult outcomes. *Development and Psychopathology* 2008;20:673-716.
11. Li M, D'Arcy C, Meng X. Maltreatment in childhood substantially increases the risk of adult depression and anxiety in prospective cohort studies: systematic review, meta-analysis, and proportional attributable fractions. *Psychological Medicine* 2016;46:717-730.
12. Chen LP, Murad HM, Paras ML, Colbenson KM, Sattler AL, Goranson EN, Elamin MB, Seime RJ, Shanozaki G, Prokop LJ, Zirakzadeh A. Sexual abuse and lifetime diagnosis of psychiatric disorders: systematic review and meta-analysis. *Mayo Clinic Proceedings* 2010;85:618-629.
13. Norman RE, Byambaa M, De R, Butchart A, Scott J, Vos T. The long-term health consequences of child physical abuse, emotional abuse, and neglect: A systematic review and meta-analysis. *PLoS Medicine* 2012;9:e1001349.
14. Paras ML, Murad MH, Chen LP, Goranson EN, Sattler AL, Colbenson KM, Elamin MB, Seime RJ, Prokop LJ, Zirakzadeh A. Sexual abuse and lifetime diagnosis of somatic disorders: a systematic review and meta-analysis. *JAMA* 2009;302:550-561.
15. Danese A, Tan M. Childhood maltreatment and obesity: systematic review and meta-analysis. *Molecular Psychiatry* 2014;19:544-554.
16. O'Doherty L, Hegarty K, Ramsay J, Davidson LL, Feder G, Taft AJ. Screening women for intimate partner violence in healthcare settings. *Cochrane Database of Systematic Reviews* 2015:CD007007.
17. Johnson WL, Giordano PC, Longmore MA, Manning Wd. Intimate Partner Violence and Depressive Symptoms during Adolescence and Young Adulthood. *Journal of Health and Social Behavior* 2014;55:39-55.
18. Ministry of Health. *Tatau Kahukura: Māori Health Chart Book 2015 (3rd Edition)*. 2015, Ministry of Health: Wellington.
19. Murphy C, Paton N, Gulliver P, Fanslow J. *Understanding connections and relationships: Child maltreatment, intimate partner violence and parenting*. 2013, New Zealand Family Violence Clearinghouse, The University of Auckland: Auckland, New Zealand.
20. Dhunna S, Lawton B, Cram F. An affront to her mana: young Māori mothers' experiences of intimate partner violence. *Journal of Interpersonal Violence* 2018:[Epub ahead of print].
21. Fanslow J, Whitehead A, Silva M, Robinson E. Contraceptive use and associations with intimate partner violence among a population-based sample of New Zealand women. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2008;48:83-89.
22. Wilson D, Webber M. *The People's Report: Addressing child abuse and domestic violence*. 2014, The Glenn Inquiry: Auckland.
23. Wilson K, Caplon A, Willie T, Alexander KA. 'Safety with my life or my freedom is real to me': Sexual safety strategies among young black women experiencing reproductive coercion. *Journal of Adolescent Health* 2019;64:S19-S20.

24. Thaller J, Messing JT. Reproductive coercion by an intimate partner: occurrence, associations, and interference with sexual health decision making. *Health and Social Work* 2016;41:e11-e19.
25. Fanslow J, Silva M, Whitehead A, Robinson E. Pregnancy outcomes and intimate partner violence in New Zealand. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2008;48:391-397.
26. O'Reilly R, Peters K. Opportunistic domestic violence screening for pregnant and post-partum women by community based health care providers. *BMC Women's Health* 2018;18:128.
27. Hamby S, Finkelhor D, Turner H, Ormrod R. The overlap of witnessing partner violence with child maltreatment and other victimizations in a nationally representative survey of youth. *Child Abuse & Neglect* 2010;34:734-741.
28. Zolotor AJ, Theodore AD, Coyne-Beasley T, Runyan DK. Intimate partner violence and child maltreatment: overlapping risk. *Brief Treatment and Crisis Intervention* 2007;7:305-321.
29. Grasso DJ, Henry D, Kestler J, Nieto R, Wakschlag LS, Briggs-Gowan MJ. Harsh parenting as a potential mediator of the association between intimate partner violence and child disruptive behavior in families with young children. *Journal of Interpersonal Violence* 2016;31:2102-2126.
30. Poole MK, Seal DW, Taylor CA. A systematic review of universal campaigns targeting child physical abuse prevention. *Health Education Research* 2014;29:388-432.
31. Trevillion K, Oram S, Feder G, Howard LM. Experiences of domestic violence and mental disorders: a systematic review and meta-analysis. *PLoS One* 2012;7:e51740.
32. Richards TN, Tillyer MS, Wright EM. Intimate partner violence and the overlap of perpetration and victimization: Considering the influence of physical, sexual, and emotional abuse in childhood. *Child Abuse & Neglect* 2017;67:240-248.
33. Stairmand M, Polaschek DLL, Dixon L. Perpetrators' perspectives on family violence: an event process model. *Journal of Interpersonal Violence* 2019:[Epub ahead of print].
34. Duncanson MJ, Smith DAR, Davies E. *Death and serious injury from assault of children aged under 5 years in Aotearoa New Zealand: A review of international literature and recent findings*. 2009, Office of the Children's Commissioner: www.occ.org.nz.
35. McLachlan A, Levy M, McClintock K, Tauroa R. A literature review: addressing indigenous parental substance use and child welfare in Aotearoa: a Whānau Ora framework. *Journal of Ethnicity in Substance Abuse* 2015;14:96-109.
36. Gulliver P, Fanslow J, Fleming T, Lucassen M, Dixon R. Uneven progress in reducing exposure to violence at home for New Zealand adolescents 2001-2012: a nationally representative cross-sectional survey series. *Australian and New Zealand Journal of Public Health* 2018;42:262-268.
37. Oranga Tamariki Evidence Centre. *How do welfare and tax settings affect children's involvement with child protective services?* 2018, Oranga Tamariki - Ministry for Children: Wellington, New Zealand.
38. Rouland B, Vaithianathan R. Cumulative prevalence of maltreatment among New Zealand children, 1998-2015. *American Journal of Public Health* 2018;108:511-513.
39. Marie D, Fergusson DM. Ethnic identity and exposure to maltreatment in childhood: Evidence from a New Zealand birth cohort. *Social Policy Journal of New Zealand* 2009:154-171.
40. Rouland B, Vaithianathan R, Wilson D, Putnam-Hornstein E. Ethnic disparities in childhood prevalence of maltreatment: evidence from a New Zealand birth cohort. *American Journal of Public Health* 2019;109:1255-1257.
41. Fanslow J, Robinson EM. Sticks, stones, or words? Counting the prevalence of different types of intimate partner violence reported by New Zealand women. *Journal of Aggression, Maltreatment & Trauma* 2011;20:741-759.
42. New Zealand Family Violence Clearinghouse. *Data Summaries: Snapshot June 2017*. 2017, New Zealand Family Violence Clearinghouse: <https://nzfvc.org.nz/sites/nzfvc.org.nz/files/Data-summaries-snapshot-2017.pdf>.
43. Giles JR, Curren HM, Adamson CE. The social sanctioning of partner abuse: perpetuating the message that partner abuse is acceptable in New Zealand. *Social Policy Journal of New Zealand* 2005.
44. Simon-Kumar R, Kurian PA, Young-Silcock F, Narasimhan N. Mobilising culture against domestic violence in migrant and ethnic communities: practitioner perspectives from Aotearoa/New Zealand. *Health & Social Care in the Community* 2017;25:1387-1395.
45. Spangaro J, Koziol-McLain J, Zwi A, Rutherford A, Frail MA, Ruane J. Deciding to tell: Qualitative configurational analysis of decisions to disclose experience of intimate partner violence in antenatal care. *Social Science & Medicine* 2016;154:45-53.
46. Thomson R, Langley J. Who do young adult victims of physical assault talk to about their experiences? *Journal of Community Psychology* 2004;32:479-488.

47. Wilson D, Jackson D, Herd R. Confidence and connectedness: Indigenous Māori women's views on personal safety in the context of intimate partner violence. *Health Care for Women International* 2016;37:707-720.
48. van Toledo A, Seymour F. Interventions for caregivers of children who disclose sexual abuse: a review. *Clinical Psychology Review* 2013;33:772-781.
49. Kelly P, John S, Vincent AL, Reed P. Abusive head trauma and accidental head injury: a 20-year comparative study of referrals to a hospital child protection team. *Archives of Disease in Childhood* 2015;100:1123-1130.
50. John SM, Jones P, Kelly P, Vincent A. Fatal pediatric head injuries: a 20-year review of cases through the Auckland coroner's office. *American Journal of Forensic Medicine and Pathology* 2013;34:277-282.
51. Baldwin JR, Reuben A, Newbury JB, Danese A. Agreement between prospective and retrospective measures of childhood maltreatment: A systematic review and meta-analysis. *JAMA Psychiatry* 2019;76:584-593.
52. van Roode T, Dickson N, Herbison P, Paul C. Child sexual abuse and persistence of risky sexual behaviors and negative sexual outcomes over adulthood: findings from a birth cohort. *Child Abuse & Neglect* 2009;33:161-172.
53. Fergusson DM, Lynskey MT. Physical punishment/maltreatment during childhood and adjustment in young adulthood. *Child Abuse & Neglect* 1997;21:617-630.
54. Fanslow JL, Robinson EM. Violence against women in New Zealand: Prevalence and health consequences. *New Zealand Medical Journal* 2004;117.
55. Fanslow J, Silva M, Whitehead A. Violence during pregnancy: associations with pregnancy intendedness, pregnancy-related care, and alcohol and tobacco use among a representative sample of New Zealand women. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2008;48:398-404.
56. Bazayr J, Safarpour H, Daliri S, Karimi A, Keykaleh MS, Bazayr M. The prevalence of sexual violence during pregnancy in Iran and the world: a systematic review and meta-analysis. *Journal of Injury and Violence Research* 2018;10:63-74.
57. Goddard C, Bedi G. Intimate partner violence and child abuse: a child-centred perspective. *Child Abuse Review* 2010;19:5-20.
58. Koziol-McLain J, Rameka M, Giddings L, Fyfe E, Gardiner J. Partner violence prevalence among women attending a Māori health provider clinic. *Australian and New Zealand Journal of Public Health* 2007;31:143-148.
59. Martin J, Langley J, Millichamp J. Domestic violence as witnessed by New Zealand children. *New Zealand Medical Journal* 2006;119:U1817.
60. Morton SMB, Grant CC, Berry SD, Walker CG, Corkin M, Ly K, de Castro TG, Atatoa Carr PE, Bandara DK, Mohal J, Bird A, Underwood L, Fa'alili-Fidow J. *Growing Up in New Zealand: A longitudinal study of New Zealand children and their families. Now We Are Four: Describing the preschool years* 2017, Growing Up in New Zealand Auckland.
61. Pihama L, Cameron N, Te Nana R. *Historical trauma and whānau violence. Issues Paper 15*. 2019, New Zealand Family Violence Clearinghouse, University of Auckland: Auckland.
62. Came H. Sites of institutional racism in public health policy making in New Zealand. *Social Science & Medicine* 2014;106:214-220.
63. Child and Youth Mortality Review Committee. *14th data report: 2013-17*. 2019, Health Quality & Safety Commission: Wellington.
64. Chong CF, Dai S. Cross-sectional study on prevalence, causes and avoidable causes of visual impairment in Māori children. *New Zealand Medical Journal* 2013;126:31-38.
65. Fanslow J, Robinson E, Crengle S, Perese L. Juxtaposing beliefs and reality: prevalence rates of intimate partner violence and attitudes to violence and gender roles reported by New Zealand women. *Violence Against Women* 2010;16:812-831.
66. D'Souza AJ, Russell M, Wood B, Signal L, Elder D. Attitudes to physical punishment of children are changing. *Archives of Disease in Childhood* 2016;101:690-693.
67. Schluter PJ, Sundborn G, Abbott M, Paterson J. Smacking—are we being too heavy-handed? Findings from the Pacific Islands Families Study. *New Zealand Medical Journal* 2007;120:U2860.
68. Schluter PJ, Tautolo el-S, Paterson J. Experience of physical abuse in childhood and perpetration of physical punishment and violence in adulthood amongst fathers: findings from the Pacific Islands Families Study. *Pacific Health Dialog* 2011;17:148-162.
69. Pereira J. Spare the rod and spoil the child: Samoan perspectives on responsible parenting. *Kōtuitui: New Zealand Journal of Social Sciences* 2010;5:98-109.
70. Gao W, Paterson J, Carter S, Lusitini L. Intimate partner violence and unplanned pregnancy in the Pacific Islands Families Study. *International Journal of Gynecology & Obstetrics* 2008;100:109-115.

71. World Health Organization. *Responding to intimate partner violence and sexual violence against women: WHO clinical and policy guidelines*. 2013, World Health Organization: Geneva.
72. Austin M-P, Highnet N, Expert Working Group. *Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline*. 2007, Centre of Perinatal Excellence: Melbourne.
73. Gottlieb AS. Domestic violence: a clinical guide for women's health care providers. *The Obstetrician & Gynaecologist* 2012;14:197-202.
74. US Preventive Services Task Force, Curry SJ, Krist AH, Owens DK, Barry MJ, Caughey AB, Davidson KW, Doubeni CA, Epling JWJ, Grossman DC, Kemper AR, M. K, Kurth A, Landefeld CS, Mangione CM, Silverstein M, Simon MA, Tseng CW, Wong JB. Screening for intimate partner violence, elder abuse, and abuse of vulnerable adults: US Preventive Services Task Force final recommendation statement. *JAMA* 2018;320:1678-1687.
75. Kleven J, Kee R, Trick W, Garcia D, Angulo FR, Jones R, Sadowski LS. Effect of screening for partner violence on women's quality of life: a randomized controlled trial. *JAMA* 2012;308:681-689.
76. Kleven J, Sadowski LS, Kee R, Garcia D, Lokey C. Effect of screening for partner violence on use of health services at 3-year follow-up of a randomized clinical trial. *JAMA* 2015;314:515-516.
77. Koziol-McLain J, Garrett N, Fanslow J, Hassall I, Dobbs T, Henare-Toka TA, Lovell V. A randomized controlled trial of a brief emergency department intimate partner violence screening intervention. *Annals of Emergency Medicine* 2010;56:413-423 e411.
78. Koziol-McLain J, Giddings L, Rameka M, Fyfe E. *Women's Perceptions of Partner Violence Screening in Two Aotearoa New Zealand Healthcare Settings: "What Took You So Long"*. 2005, Interdisciplinary Trauma Research Unit, Auckland University of Technology: Auckland, New Zealand.
79. Spangaro JM, Zwi AB, Poulos RG, Man WY. Six months after routine screening for intimate partner violence: attitude change, useful and adverse effects. *Women & Health* 2010;50:125-143.
80. Doyle O, Harmon CP, Heckman JJ, Tremblay RE. Investing in early human development: timing and economic efficiency. *Economics & Human Biology* 2009;7:1-6.
81. Taft AJ, O'Doherty L, Hegarty K, Ramsay J, Davidson L, Feder G. Screening women for intimate partner violence in healthcare settings. *Cochrane Database of Systematic Reviews* 2013:CD007007.
82. PMMRC. *Te Pūrongo ā-Tau Tekau mā Toru o te Komiti Arotake Mate Pēpi, Mate Whaea Hoki | Thirteenth Annual Report of the Perinatal and Maternal Mortality Review Committee: Te tuku pūrongo mō te mate me te whakamate 2017 | Reporting mortality and morbidity 2017*. 2019, Health Quality & Safety Commission: Wellington.
83. PMMRC. *Eleventh Annual Report of the Perinatal and Maternal Mortality Review Committee: Reporting mortality 2015*. 2017, Health Quality & Safety Commission: Wellington.
84. Ministry of Health. *Well Child/Tamariki Ora National Schedule 2013*. 2013, Ministry of Health: Wellington.
85. Ministry of Health. *Well Child/Tamariki Ora Programme Practitioner Handbook: Supporting families and whānau to promote their child's health and development - Revised 2014*. 2013, Ministry of Health: Wellington.
86. Interdisciplinary Trauma Research Unit. *Plunket Family Violence Evaluation Project*. 2007, Auckland University of Technology: Auckland.
87. Feder G, Ramsay J, Dunne D, Rose M, Arsene C, Norman R, Kuntze S, Spencer A, Bacchus L, Hague G, Warburton A, Taket A. How far does screening women for domestic (partner) violence in different health-care settings meet criteria for a screening programme? Systematic reviews of nine UK National Screening Committee criteria. *Health Technology Assessment* 2009;13.
88. Sprague S, Madden K, Simunovic N, Godin K, Pham NK, Bhandari M, Goslings JC. Barriers to screening for intimate partner violence. *Women & Health* 2012;52:587-605.
89. Wyatt T, McClelland ML, Spangaro J. Readiness of newly licensed associated degree registered nurses to screen for domestic violence. *Nurse Education in Practice* 2019;35:75-82.
90. Lee ASD, McDonald LR, Will S, Wahab M, Lee J, Coleman JS. Improving provider readiness for intimate partner violence screening. *Worldviews on Evidence Based Nursing* 2019;16:204-210.
91. Stenson K, Saarinen H, Heimer G, Sidenvall B. Women's attitudes to being asked about exposure to violence. *Midwifery* 2001;17:2-10.
92. Chang JC, Decker MR, Moracco KE, Martin SL, Petersen R, Frasier PY. Asking about intimate partner violence: advice from female survivors to health care providers. *Patient Education and Counseling* 2005;59:141-147.
93. Jury A, Thorburn N, Burry K. *"There was no other way out": Exploring the relationship between women's experiences of intimate partner violence and their self-harm, suicidal thoughts, and suicide events*. 2018, National Collective of Independent Women's Refuges: Wellington.
94. Sherin KM, Sinacore JM, Li X-Q, Zitter RE, Shakil A. HITS: A short domestic violence screening tool for use in a family practice setting. *Family Medicine* 1998;30:508-512.

95. Sohal H, Eldridge S, Feder G. The sensitivity and specificity of four questions (HARK) to identify intimate partner violence: a diagnostic accuracy study in general practice. *BMC Family Practice* 2007;8:49.
96. Weiss SJ, Ernst AA, Cham E, Nick TG. Development of a screen for ongoing intimate partner violence. *Violence and Victims* 2003;18:131-141.
97. Reichenheim ME, Moraes CL. Comparison between the abuse assessment screen and the revised conflict tactics scales for measuring physical violence during pregnancy. *Journal of Epidemiology and Community Health* 2004;58:523-527.
98. Ministry of Health. *Supporting Evidence for Changes to the Content of the Well Child / Tamariki Ora Framework: Background Paper 2007*. 2010, Ministry of Health: Wellington.
99. Paek SH, Jung JH, Kwak YH, Kim DK, Ryu JM, Noh H, Kyong YY, Kang YJ. Development of screening tool for child abuse in the Korean emergency department: Using modified Delphi study. *Medicine* 2018;97:e13724.
100. Dudas L, Petrohoy G, Esernio-Jenssen D, Lansenderfer C, Stirparo J, Dunstan M, Browne M. Every child, every time: hospital-wide child abuse screening increases awareness and state reporting. *Pediatric Surgery International* 2019;35:773-778.
101. Rumball-Smith J, Fromkin J, Rosenthal B, Shane D, Skrbini J, Bimber T, Berger RP. Implementation of routine electronic health record-based child abuse screening in General Emergency Departments. *Child Abuse & Neglect* 2018;85:58-67.
102. Ondersma SJ, Chaffin MJ, Mullins SM, LeBreton JM. A brief form of the child abuse potential inventory: development and validation. *Journal of Clinical Child & Adolescent Psychology* 2005;34:301-311.
103. Ellonen N, Rantanen h, Lepistö S, Helminen M, Paavilainen E. The use of the Brief Child Abuse Potential Inventory in the general population in Finland. *Scandinavian Journal of Primary Health Care* 2019;37:128-134.
104. Ellonen N, Lepistö S, Helminen M, Paavilainen E. Cross-cultural validation of the Child Abuse Potential Inventory in Finland: preliminary findings of the study among parents expecting a baby. *Journal of Social Service Research* 2017;43:308-318.
105. Liel C, Meinck F, Steinert JI, Kindler H, Lang K, Eickhorst A. Is the Brief Child Abuse Potential Inventory (BCAPI) a valid measure of child abuse potential among mothers and fathers of young children in Germany? *Child Abuse & Neglect* 2019;88:432-444.
106. Fanslow J, Gulliver P. Exploring risk and protective factors for recent and past intimate partner violence against New Zealand women. *Violence & Victims* 2015;30:960-983.
107. Friedman SH, McEwan MV. Treated mental illness and the risk of child abuse perpetration. *Psychiatric Services* 2018;69:211-216.
108. Jahanfar S, Howard LM, Medley N. Interventions for preventing or reducing domestic violence against pregnant women. *Cochrane Database of Systematic Reviews* 2014:CD009414.
109. Kiely M, El-Mohandes AA, El-Khorazaty MN, Blake SM, Gantz MG. An integrated intervention to reduce intimate partner violence in pregnancy: a randomized controlled trial. *Obstetrics and Gynecology* 2010;115:273-283.
110. Arora S, Deosthali PB, Rege S. Effectiveness of a counselling intervention implemented in antenatal setting for pregnant women facing domestic violence: a pre-experimental study. *BJOG* 2019;126:50-57.
111. Rivas C, Vigurs C, Cameron J, Yeo L. A realist review of which advocacy interventions work for which abused women under what circumstances (Review). *Cochrane Database of Systematic Reviews* 2019:CD013135.
112. Sharps PW, Bullock LF, Campbell JC, Alhusen JL, Ghazarian SR, Bhandari SS, Schminkey DL. Domestic violence enhanced perinatal home visits: The DOVE randomized clinical trial. *Journal of Women's Health* 2016;25:1129-1138.
113. Viswanathan M, Fraser JG, Pan H, Morgenlander M, McKeeman JL, Forman-Hoffman VL, Hart LC, Zolotor AJ, Lohr KN, Patel S, Jonas DE. Primary care interventions to prevent child maltreatment: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA* 2018;320:2129-2140.
114. Dauber S, Hogue A, Henderson CE, Nugent J, Hernandez G. Addressing maternal depression, substance use, and intimate partner violence in home visiting: a quasi-experimental pilot test of a screen-and-refer approach. *Prevention Science* 2019:[Epub ahead of print].
115. Fergusson DM, Boden JM, Horwood LJ. Nine-year follow-up of a home-visitation program: a randomized trial. *Pediatrics* 2013;131:297-303.
116. Fergusson DM, Horwood LJ, Ridder E. *Early Start Evaluation Report*. 2005, Early Start Project Ltd: Christchurch.
117. Vaithianathan R, Rouland B, Putnam-Hornstein E. Injury and mortality among children identified as at high risk of maltreatment. *Pediatrics* 2018;141:e20172882.

118. Fergusson DM, Boden JM, Horwood LJ. *Early Start Evaluation report: Nine year follow-up*. 2012, University of Otago: Christchurch.
119. Vaithianathan R, Wilson M, Maloney T, Baird S. *The Impact of the Family Start Home Visiting Programme on Outcomes for Mothers and Children: A Quasi-Experimental Study*. 2016, Ministry of Social Development: Wellington.
120. Anderson K, Van Ee E. Mothers and children exposed to intimate partner violence: a review of treatment interventions. *International Journal of Environmental Research and Public Health* 2018;15:1955.
121. Sturrock F, Gray D, Fergusson D, Horwood J, Smits C. *Incredible Years Follow-up Study: Long-term follow-up of the New Zealand Incredible Years Pilot Study*. 2014, Ministry of Social Development: Wellington, New Zealand.
122. Lakhota S. *Ngā Tau Mīharo o Aotearoa: Incredible Years Parenting Programm, Social Impact Report*. 2019, Te Whānau o Waipareira Trust: <https://wairesearch.waipareira.com/>.
123. Mihalopoulos C, Sanders MR, Turner KMT, Murphy-Brennan M, Carter R. Does the Triple P – Positive Parenting Program provide value for money? *Australian and New Zealand Journal of Psychiatry* 2007;41:239-246.
124. Keown LJ, Sanders MR, Franke N, Shepherd M. Te Whānau Pou Toru: a randomized controlled trial (RCT) of a culturally adapted low-intensity variant of the Triple P-Positive Parenting Program for indigenous Māori families in New Zealand. *Prevention Science* 2018;19:954-965.
125. Smedslund G, Dalsbø TK, Steiro A, Winsvold A, Clench-Aas J. Cognitive behavioural therapy for men who physically abuse their female partner. *Cochrane Database of Systematic Reviews* 2011:CD006048.
126. Vigurs C, Schucan-Bird K, Quy K, Gough D. *The impact of domestic violence perpetrator programmes on victim and criminal justice outcomes: a systematic review of reviews of research evidence*. 2015, College of Policing: London.
127. Tarzia L, Forsdike K, Feder G, Hegarty K. Interventions in health settings for male perpetrators or victims of intimate partner violence. *Trauma Violence Abuse* 2020;21:123-137.
128. Stover CM, Meadows AL, Kaufman J. Interventions for intimate partner violence: Review and implications for evidence-based practice. *Professional Psychology: Research and Practice* 2009;40:223-233.
129. Vigurs C, Schucan-Bird K, Quy K, Gough D. *A systematic review of motivational approaches as a pre-treatment intervention for domestic violence perpetrator programmes*. 2016, College of Policing: London.
130. McCalman J, Heyeres M, Campbell S, Bainbridge R, Chamberlain C, Strobel N, Ruben A. Family-centred interventions by primary healthcare services for Indigenous early childhood wellbeing in Australia, Canada, New Zealand and the United States: a systematic scoping review. *BMC Pregnancy and Childbirth* 2017;17:71.
131. Independent Whānau Ora Review Panel. *Tipu Matoro ki te Ao: Final Report to the Minister for Whānau Ora*. 2018, Te Puni Kōkiri - Ministry of Māori Development: <https://www.tpk.govt.nz/>.
132. Chisnell C, Peter S, Merchant R, Luscombe T, Tua J. Community-led prevention of domestic violence: An innovative initiative of couples-based course in Aotearoa New Zealand. *Social Work and Policy Studies: Social Justice, Practice and Theory* 2019;2.
133. Robertson N, Busch R, D'Souza R, Sheung FL, Anand R, Balzer R, Simpson A, Paina D. *Living at the Cutting Edge: Women's Experiences of Protection Orders. Volume 2: What's To Be Done? A Critical Analysis of Statutory and Practice Approaches to Domestic Violence*. 2007, Ministry of Women's Affairs.
134. Morrison B, Davenne J. Family violence perpetrators: Existing evidence and new directions. *Practice: The New Zealand Corrections Journal* 2016;4.
135. Rickard S. Koi patu koi maemae: disciplining Māori children. *Social Work Now* 1998;11:4-9.
136. Wilson D. Transforming the normalisation and intergenerational whānau (family) violence. *Journal of Indigenous Wellbeing* 2016;1:32-43.
137. Dobbs T, Eruera M. *Kaupapa Māori wellbeing framework: The basis for whānau violence prevention and intervention*. 2014, New Zealand Family Violence Clearinghouse, University of Auckland: Auckland, New Zealand.
138. Rankine J, Percival T, Finau E, Hope LT, Kingi P, Peteru MC, Powell E, Robati-Mani R, Selu E. Pacific Peoples, violence, and the Power and Control Wheel. *Journal of Interpersonal Violence* 2017;32:2777-2803.

Supplementary Information - Grade definitions and levels of certainty

Table S1. Grade definitions for screening tools and interventions

Adapted with permission from the U.S. Preventive Services Task Force 2012.ⁱⁱⁱ

Grade	Definition	Recommendation for policy and practice
A	<ul style="list-style-type: none"> The authors recommend this screening tool/intervention. There is high certainty that the net benefit is substantial. 	<ul style="list-style-type: none"> This screening tool/intervention should be offered or provided.
B	<ul style="list-style-type: none"> The authors recommend the screening tool/intervention. There is high certainty that the net benefit is moderate, or there is moderate certainty that the net benefit is moderate to substantial. 	<ul style="list-style-type: none"> This screening tool/intervention should be offered or provided.
C	<ul style="list-style-type: none"> The authors recommend selectively offering or providing this screening tool/intervention to patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small. 	<ul style="list-style-type: none"> This screening tool/intervention should be provided for selected patients depending on individual circumstances.
D	<ul style="list-style-type: none"> The authors recommend against this screening tool/intervention. There is moderate or high certainty that the screening tool/intervention has no net benefit or that the harms outweigh the benefits. 	<ul style="list-style-type: none"> The authors discourage the use of this screening tool/intervention.
I	<ul style="list-style-type: none"> The authors conclude that the current evidence is insufficient to assess the balance of benefits and harms of the screening tool/intervention. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined. 	<ul style="list-style-type: none"> If the screening tool/intervention is offered, patients should understand the uncertainty about the balance of benefits and harms.

Table S2. Levels of certainty regarding net benefit

Adapted with permission from the U.S. Preventive Services Task Force 2012.¹

Level Of Certainty	Description
High	<ul style="list-style-type: none"> The available evidence usually includes consistent results from well-designed, well-conducted studies in representative populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	<ul style="list-style-type: none"> The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by such factors as: <ul style="list-style-type: none"> the number, size, or quality of individual studies; inconsistency of findings across studies; limited generalizability of findings to routine practice; lack of coherence in the chain of evidence. As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion(s).
Low	<ul style="list-style-type: none"> The available evidence is insufficient to assess effects on health outcomes, because of: <ul style="list-style-type: none"> the limited number and/or size of studies; important flaws in study design and/or methods; inconsistency of findings across individual studies; gaps in the chain of evidence; findings not generalizable to routine practice; lack of information on important health outcomes. More information may allow estimation of effects on health outcomes.

ⁱⁱⁱ <https://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions>