

The economic and social cost of child abuse in Victoria, 2009-10

Protecting Victoria's
Vulnerable Children Inquiry

September 2011

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List of acronyms

ABS	Australian Bureau of Statistics
AF	attributable fraction
AIHW	Australian Institute of Health and Welfare
CPI	Consumer Price Index
DALY	disability adjusted life year
DHS	Department of Human Services
ICD	International Classification of Disease
NPV	net present value
OOHC	out of home care
SAAP	Supported Accommodation Assistance Program
SCRGSP	Standing Committee Report on Government Services Provision
VSLY	value of a statistical life year
YLD	Years of healthy life lost due to disability
YLL	Years of life lost due to premature death

1 Executive summary

Child abuse and neglect are associated with many adverse outcomes for the individuals concerned and the community more generally. In brief, child abuse and neglect have been associated with the following.

- physical injury and illness (brain injuries, central nervous system injuries, fractures, reproductive health problems, ocular damage, sexual dysfunction, irritable bowel syndrome, heart disease and other illnesses);
- mental illnesses (including anxiety and depression, eating disorders, post traumatic stress disorder and suicide);
- high risk sexual behaviour;
- substance misuse;
- poor social functioning and participation in society;
- adult victimisation;
- developmental delay and impairment, cognitive and neurological impairment, low academic achievement;
- poor employment and earnings outcomes;
- delinquency and adult criminal behaviour, and subsequent victimisation of children; and
- homelessness and greater rates of use of welfare.

Deloitte Access Economics was appointed to prepare an estimate of the cost of child abuse in Victoria in 2009-10 based on the method used in Taylor et al, 2008.

Incidence and prevalence of abuse in Victoria

Both incidence and prevalence estimates were generated for this report.

- The incidence of child abuse represents the number of children abused for the first time in 2009-10. The incidence costs measure the associated costs of abuse over each abused person's lifetime.
- The prevalence of child abuse in this case is an annual measure, representing the number of children abused in 2009-10 – whether for the first time or not. The prevalence costs measure the associated costs of abuse or neglect which occurred in 2009-10.

There is a great deal of uncertainty about the extent of abuse and neglect which occurs — more uncertainty than for other types of physical or mental illness — because of the nature of the act and the harm caused.

- The highest rates of abuse and neglect occur among children aged less than five years old. These children are generally unable to articulate their experience. Moreover, they may be unable to judge what types of behaviour are unacceptable until much later in life.

- Those who have experienced abuse are likely to have suffered trauma and may be unwilling to openly discuss or revisit their experience. Furthermore, there may be a stigma attached to revelations of abuse and uncertainty about how such revelations are received.
- Children who have experienced abuse may have a reduced capacity to trust and may lack self esteem. These characteristics tend to mean they are unwilling to report abuse.
- Abuse can be difficult to detect and diagnose by others.

Moreover, efforts to synthesise the many studies of the extent of occurrence of child abuse and neglect are hampered by the following.

- Differences in scope (the type of abuse studied).
- Differences in definitions of abuse and thresholds for determining abuse.
- Differences in counting methods.
- Differences in sample characteristics.

Certain types of sample characteristics, counting methods, and definitions can introduce biases into estimates and it is difficult to adjust for this given the lack of knowledge on which to base methods for adjustment. Given the uncertainty surrounding estimates of the prevalence and incidence of abuse, two sets of estimates are reported here — a lower bound and a best estimate. Both are conservative.

Lower bound

The lower bound estimate of prevalence and incidence is based on the number of children who were the subject of a substantiation by the Victorian child protection system. Substantiations refer to cases which have been investigated and it is concluded that the child has been, is being, or is likely to be, abused, neglected or otherwise harmed. A child can be the subject of more than one substantiation.

The **prevalence** estimate was based on the number of Victorian children in substantiations adjusted upwards for investigations still in progress at the end of the financial year and for cases where a decision not to substantiate was followed by a subsequent decision to substantiate. The lower bound estimate of prevalence is around six Victorian children aged 0-17 years old per 1,000.

Lower bound **incidence** estimates were derived by adjusting the prevalence estimates to remove the proportion of Victorian children who were subject to repeated abuse over a number of years. The proportion of children subject to repeated abuse or neglect lasting more than one year was derived from a literature review (see Taylor et al, 2008). The lower bound estimate of incidence is around four Victorian children aged 0-17 years old per 1,000.

Notably, estimates of abuse based on substantiations data are likely to underestimate the extent of abuse. In the main, this is because a substantial amount of abuse is not reported to authorities for reasons explained above. In addition, counts of substantiations reflect the legislative and practice arrangements in place, and the proportion of notifications that are investigated. In 2009-10 in Victoria, close to 29% of notifications were investigated.

Best estimate

The best estimate of prevalence and incidence is drawn from self-reports of child physical and sexual abuse by adults based on their recollections of childhood from the Australian Bureau of Statistics (ABS) Personal Safety Survey conducted in 2005 (ABS 2006). The survey has not been updated since the original report (Taylor et al 2008) was released. The survey found that the lifetime prevalence of child physical or sexual abuse was around 17.8%. The best estimate of **prevalence** used in this report was derived by converting the lifetime prevalence rate from the ABS survey to an annual prevalence rate for Victoria (just under 3.7%).

Best estimates of **incidence** in this report were calculated by factoring up the lower bound incidence estimates for the difference in between the lower bound prevalence rate (0.6%) and the ABS Personal Safety Survey estimate of one year prevalence (3.7%). The best estimate of incidence is just under 27 Victorian children aged 0-17 years per 1,000.

The best estimate also understates the occurrence of abuse because:

- the ABS survey only asked about physical and sexual abuse, and other types of abuse (emotional or psychological and witnessing family violence) and neglect were excluded; and
- the sample excluded people living in institutions and people living in very remote areas (the former are arguably more likely to have experienced child abuse) and people who died as a result of abuse.

The 'best estimates' need to be treated with caution because the survey responses are likely to have been affected by a number of factors including:

- sensitivities associated with talking about experiences of child abuse, as discussed earlier; and
- reliance by respondents on recall, which can introduce some uncertainty, particularly in recalling episodes of abuse between the ages of 0-4 years when other data suggests abuse rates are relatively higher than for older children.

Scope of costs

There are financial costs associated with abuse (e.g. the costs of service provision), as well as non-financial costs (loss of wellbeing). The **financial** costs for Victoria estimated in this report include the following:

- health system costs including:
 - the costs of treating injuries directly resulting from physical abuse and fatal abuse; and
 - long term (downstream) costs of illnesses and premature death experienced by adults who were abused as children. Types of illnesses included are: suicide, physical injuries, depression, anxiety, and substance misuse (including alcohol and drugs);
- education system costs associated with potentially poorer educational achievement leading to additional assistance required at school;

- productivity losses due to poorer employment and earnings outcomes resulting from lower than average rates of completing Year 12 by children in out of home care (OOHC);
- justice system costs including:
 - the cost of care and protection orders;
 - Coroner's Court costs of investigating child deaths or suspicious deaths;
 - the costs associated with investigating abuse such as police investigations, prosecution costs and the costs of incarceration of perpetrators of child abuse;
 - victim support; and
 - the costs of crimes committed in cases where children who experienced abuse go on to commit crimes in later life;
- the costs of the child protection system and intensive family support services;
- the costs of greater than average use of crisis accommodation by families in which abuse has occurred, and the cost of greater than average use of public housing by children leaving OOHC;
- deadweight losses associated with additional welfare payments and government expenditures associated with child abuse. While welfare payments are not in themselves economic costs (they are transfer payments), they are associated with efficiency losses (or to use economic terminology — deadweight losses). Deadweight losses reflect the resources required to administer the taxation and welfare systems, the associated costs of compliance activities and the behavioural distortions resulting from the incentives associated with taxation and welfare.

The **non-financial** cost — or loss of wellbeing resulting from child abuse — is also estimated here, measured in disability adjusted life years (DALYs). A monetary valuation is placed on the loss of wellbeing using the Commonwealth Department of Finance and Deregulation, Office of Best Practice Regulation estimate of the value of a statistical life year. However, this value cannot be added to the financial costs and is for comparative purposes only.

Caveats and considerations

Limitations to data and evidence mean that there will naturally be a margin of uncertainty surrounding the magnitude of the estimated costs. In particular, there is a paucity of studies with long term follow up of children who experienced abuse or neglect — and the studies that are available have very small sample sizes. Hence, it is very difficult to quantify the long term (or downstream) impact of abuse and neglect and thus capture the costs.

It is difficult to isolate the extent to which ill health, substance misuse, poor social functioning, adult victimisation, poor employment and earnings outcomes and the other adverse outcomes listed above can be directly attributed to abuse. Risk factors for child abuse and neglect include low socioeconomic status leading to economic stress and disadvantage, poor parental mental health, parental substance misuse, family disruption, and disability of the child. These risk factors for child abuse are themselves associated with the undesirable outcomes above, and hence confound efforts to isolate the impact of abuse. Where possible, the methodology here uses parameters which adjust for confounding factors such as socioeconomic circumstances.

It has not been possible to present estimates which reflect the spectrum of severity of harm resulting from abuse and neglect. This is unfortunate because some children experience extreme harm (including premature death, severe disability, and severe depression) and for these individuals the costs of abuse are very high. However, it is difficult to predict the severity of harm based on the type or nature of abuse because some children are more resilient than others, or there may be factors in the child's environment which moderate the harm resulting from abuse (for example, an alternative influential and stable care figure). In addition, for many of the cost components, the data and evidence available do not allow the systematic adjustment of costs to account for different degrees of, or severity of, harm.

Some children who survive abuse may experience extreme loss of wellbeing but no (or few) financial costs because they do not use health or other support services. For example, children may survive abuse but, as a result, exist with lifelong severe depression for which they never seek treatment. In this report, these cases will be reflected in the loss of wellbeing from depression (counted as DALYs).

Prevalence costs

In total, the financial costs in 2009-10 of child abuse and neglect in Victoria were estimated to lie between \$876.6 million and \$1.0 billion (Table i). In addition, abuse was also associated with loss of wellbeing and premature mortality estimated at between 1,384 and 6,866 DALYs, and valued at between \$221 million and \$1.1 billion.

The largest component of the financial costs was Victorian Government expenditure on child protection, OOHC, intensive family support services and the Office of the Child Safety Commissioner.

There is no difference between the lower bound and best estimate for many of the costs. This reflects the methodology used. Not all of the estimated costs vary with prevalence.

- In accordance with the methodology, estimates of productivity losses associated with premature death remain the same for the lower bound and best estimate because the number of deaths is fixed as a proportion of the Victorian population by age and gender.
- Spending on the child protection system and intensive family support services is fixed at the amount spent by the government in 2009-10.
- Public housing costs are based on the number of children leaving OOHC in 2009-10 (which was assumed not to vary with different estimates of prevalence).
- The costs of the Supported Accommodation and Assistance Program (SAAP) and crime, courts and victim support are estimated as the proportion of expenditure accounted for by the relevant services (including justice system services) supplied.

Table i: Summary of prevalence costs, Victoria, 2009-10

	<i>Units</i>	Lower bound	Best estimate
Prevalence	<i>Number of children</i>	7,340	44,740
Financial costs			
Health system	<i>(\$'000)</i>	20,367	124,164
Education	<i>(\$'000)</i>	3,516	14,864
Productivity Losses – lower employment	<i>(\$'000)</i>	989	1,753
Productivity losses – premature death	<i>(\$'000)</i>	1,820	1,820
Child protection, OOH, intensive family support and Child Safety Commissioner	<i>(\$'000)</i>	518,128	518,128
Public housing	<i>(\$'000)</i>	3,942	3,942
SAAP	<i>(\$'000)</i>	16,297	16,297
Crime, courts and victim support	<i>(\$'000)</i>	103,498	103,498
Second generation crime	<i>(\$'000)</i>	354	2,157
Deadweight losses	<i>(\$'000)</i>	207,682	241,374
Total financial costs	<i>(\$'000)</i>	876,593	1,027,997
Burden of disease			
DALYs	<i>DALYs</i>	1,380	6,870
Value of DALYs	<i>(\$'000)</i>	221,242	1,097,620

Incidence costs

In total, the financial costs of child abuse and neglect which occurred for the first time in 2009-10 in Victoria were between \$1.6 billion and \$1.9 billion (0). In addition, abuse was also associated with loss of wellbeing and premature mortality of between 1,315 and 7,640 DALYs. The loss of wellbeing has been valued at between \$210 million and \$1.2 billion. Victorian Government expenditure on child protection, OOH, intensive family services and the Office of the Child Safety Commissioner accounted for the majority of the incidence costs.

The preferred estimate of the lifetime **financial** cost of abuse per child is of the order of \$300,000. Notably — this **excludes** loss of wellbeing (DALYs).

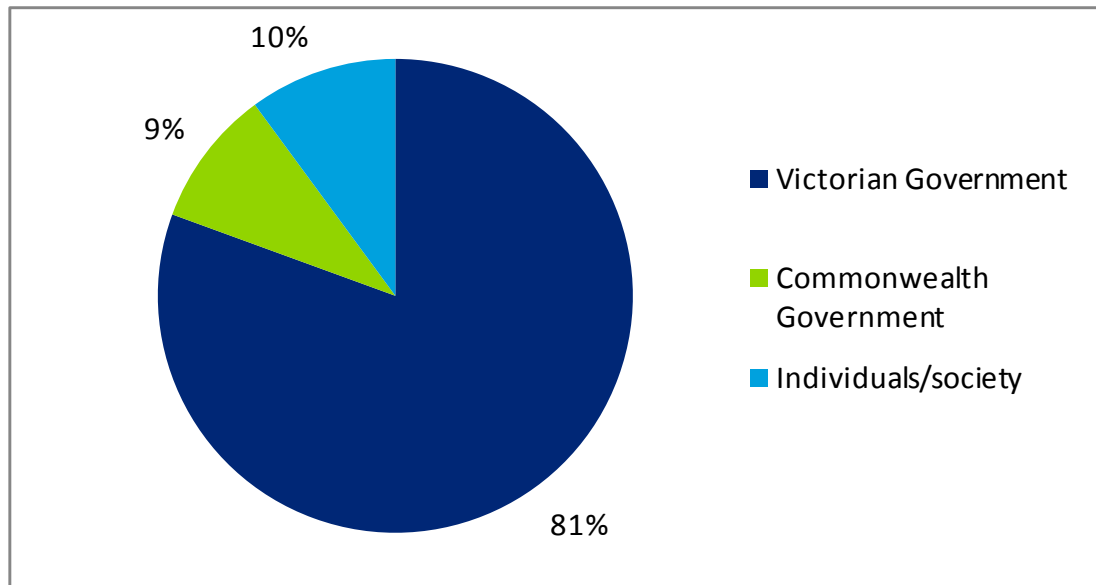
Table ii: Summary of incidence abuse and costs, Victoria, 2009-10

	<i>Units</i>	Lower bound	Best estimate
Incidence	<i>Number of children</i>	5,390	32,850
Financial costs			
Health system	<i>(\$'000)</i>	29,781	187,660
Education	<i>(\$'000)</i>	6,372	38,693
Productivity Losses – lower employment	<i>(\$'000)</i>	11,015	67,150
Productivity losses – premature death	<i>(\$'000)</i>	37,084	37,084
Child protection, OOHC, intensive family support and Child Safety Commissioner	<i>(\$'000)</i>	1,032,141	1,032,141
Public housing	<i>(\$'000)</i>	25,300	25,300
SAAP	<i>(\$'000)</i>	11,978	11,978
Crime, courts and victim support	<i>(\$'000)</i>	74,443	74,443
Second generation crime	<i>(\$'000)</i>	260	1,585
Deadweight losses	<i>(\$'000)</i>	351,245	411,392
Total financial costs	<i>(\$'000)</i>	1,579,619	1,887,428
Lifetime financial costs	<i>(\$'000)</i>	293	57
Burden of disease			
DALYs	<i>DALYs</i>	1,315	7,640
Value of DALYs	<i>(\$'000)</i>	210,064	1,221,055

How the costs are distributed

The majority of the financial costs of child abuse and neglect are incurred by the Victorian Government (Chart 7.3). These shares are approximate because Commonwealth contributions (via Special Purpose Payments) are treated as State expenditure. It is important to reiterate that the non-financial costs (the loss of wellbeing experienced by Victorian children who have been abused or neglected) are not included in Chart 7.3. These non-financial costs are incurred by the children themselves. So the share of the total costs of abuse experienced by individuals is much higher than 10%.

Chart 1.1: Distribution of financial costs



Deloitte Access Economics

2 Introduction

Deloitte Access Economics was appointed to prepare an estimate of the cost of child abuse in Victoria in 2009-10 based on the method used in Taylor et al, 2008.

Child abuse and neglect are associated with many adverse outcomes for the individuals concerned and the community more generally. Poor health, poor social functioning and participation in society, poor educational attainment and labour market outcomes, homelessness, delinquency and crime, adult victimisation and early death have all been associated with abuse and neglect in childhood.

This report is structured as follows:

- Methods, data sources and caveats are described in detail in chapter 3.
- The incidence and prevalence of abuse, and mortality associated with child abuse are presented in chapter 4.
- The estimates of the prevalence costs are presented in chapter 5.
- In chapter 6, the incidence cost estimates are described.
- There is a summary of costs in chapter 7.
- References are in chapter 8.
- The population data used to inform the estimates is in Appendix A.

3 Methods, data sources and caveats

The methods used to derive the incidence and prevalence of abuse and neglect, deaths from abuse, and the associated costs are summarised in this chapter together with data sources and caveats. For a more detailed explanation of the methods, including extensive discussion of the literature which provides the basis for the parameters used in calculating the cost estimates, please refer to the original report (Taylor et al 2008).

3.1 Defining incidence and prevalence

Incidence and prevalence approaches are used to estimate the costs of child abuse in this report.

The incidence of child abuse represents the number of children abused for the first time in 2009-10. The incidence costs measure the associated costs of abuse over each abused person's lifetime. The total costs represent the net present value (NPV) of current and future costs incurred due to new cases in 2009-10. The real discount rate used in this report is 3%.

The prevalence of child abuse in this case is an annual measure, representing the number of children abused in 2009-10 – whether for the first time or not. The prevalence costs measure the associated costs of abuse or neglect which occurred in 2009-10.

3.2 Measuring incidence and prevalence of abuse

Two sets of estimates of the cost of child abuse are reported here because there is a great deal of uncertainty about the extent of abuse and neglect which occurs.

First, there is greater uncertainty surrounding measures of the incidence/prevalence of child abuse compared with other types of physical illness (for example) because of the nature of the act and the harm caused.

- The highest rates of abuse and neglect occur among children aged less than five years old. These children are generally unable to articulate their experience. Moreover, they may be unable to judge what types of behaviour are unacceptable until much later in life.
- Those who have experienced abuse are likely to have suffered trauma and may be unwilling to openly discuss or revisit their experience. Furthermore, there may be a stigma attached to revelations of abuse and uncertainty about how such revelations are received.
- Children who have experienced abuse may have a reduced capacity to trust and may lack self esteem. These characteristics tend to mean they are less likely to report abuse.
- Abuse can be difficult to detect and diagnose by others.

Moreover, efforts to synthesise the many studies of the extent of occurrence of child abuse and neglect are hampered by the following.

- **Differences in scope (the type of abuse studied).** There are different types of abuse, with common categories including sexual, physical, emotional or psychological abuse, neglect and witnessing violence. Few studies count the occurrence of all types of abuse. Most studies focus on only one type of abuse. However, the co-occurrence of different types of abuse (e.g. a child is likely to experience both sexual and emotional abuse together rather than sexual abuse alone) means it is not possible simply to add together estimates of different types of abuse.
- **Differences in definitions of abuse and thresholds for determining abuse.** There are many different definitions of abuse and so estimates from different studies can rarely be compared or combined. For example, some studies count *acts* of physical or sexual abuse, while others focus on the *harm* caused. Some studies define sexual abuse to include touching, whereas other studies include verbal suggestion and child pornography. Thresholds also differ, for example, the standard of care provided (for example, whether a parent allows a child aged three years old to play outside unsupervised and if so for how long) or the types of care omitted (for example, whether the definition of neglect includes cases where a parent does not take a child with asthma to an emergency department).
- **Differences in counting methods.** Many varied methods have been used to estimate the incidence/prevalence of abuse. Some studies collect primary data, e.g. directly surveying children or their carers (e.g. teachers) or surveying adults and asking them about their recollections of abuse during childhood. Other studies have used secondary data sets, such as justice system or child protection data.
- **Differences in sample characteristics.** Differences in sample characteristics also hinder synthesis of different studies of abuse. For example, some studies have asked children attending a selected secondary school, while others have asked adolescents involved in the juvenile justice system. Age groups and gender of children studied differ, as do their location, socioeconomic status and other characteristics.

Certain types of sample characteristics, counting methods, and definitions can introduce biases into the results and it is difficult to adjust for bias given the lack of knowledge on which to base methods for adjustment.

Given the uncertainty surrounding estimates of the prevalence and incidence of abuse, two sets of estimates are reported here — a lower bound and a best estimate. Both are conservative, as explained below in section 3.3.

Three estimates were reported in Taylor et al, (2008) — including an upper bound which is not reported here. As explained in that original report, the upper bound was perhaps the least reliable in an Australian context and possibly overstated the occurrence of abuse. It was based on a survey of children in the United States and included bullying and assault by peers and siblings, robbery, vandalism and theft — as well as abuse inflicted by parents or carers.

3.3 Incidence and prevalence of abuse and associated mortality

3.3.1 Lower bound – prevalence and incidence

The lower bound is based on the number of children who were the subject of a substantiation by child protection authorities. Substantiations refer to cases which have been investigated and it is concluded that the child has been, is being, or is likely to be, abused, neglected or otherwise harmed (see definitions in the box below). A child can be the subject of more than one substantiation.

Definitions

Notification: Notifications consist of contacts made to an authorised department by persons or other bodies making allegations of child abuse or neglect, child maltreatment or harm to a child. A notification can only involve one child. Where it is claimed that two children have been abused or neglected or harmed, this is counted as two notifications.

Investigation: Investigations are the process whereby the relevant department obtains more detailed information about a child who is the subject of a notification. Departmental staff make an assessment about the harm or degree of harm to the child and their protective needs.

Substantiation: Substantiations of notifications refer to child protection notifications made to relevant authorities which were investigated and it was concluded that there was reasonable cause to believe that the child had been, was being, or was likely to be, abused, neglected or otherwise harmed. Substantiations may also include cases where there is no suitable caregiver, such as children who have been abandoned or whose parents are deceased.

Source: Australian Institute of Health and Welfare (AIHW) (2011a:12-13)

Prevalence

The prevalence of abuse was based on the number of children in substantiations adjusted upwards for investigations still in process at the end of the financial year and for cases where a decision not to substantiate was followed by a subsequent decision to substantiate.

AIHW (2011a) data for children in substantiations by age and gender in 2009-10 were combined with more detailed unpublished information by age and gender from the Victorian Government. Data for the adjustments was as follows.

- The proportion of finalised investigations that resulted in substantiations was multiplied by the number of investigations still in progress (AIHW 2011a).

- Data for cases where a decision not to substantiate abuse was followed by a subsequent decision to substantiate (Steering Committee for the Review of Government Service Provision (SCRGSP) 2011).

Incidence

Incidence estimates were derived from the prevalence estimates. The prevalence estimates include children abused for the first time in 2009-10 as well as children who were subject to repeated abuse over a number of years. Research referenced in Taylor et al, (2008:52) suggested that repeat abuse lasting over one year or more occurs in 26.5% of children.

Substantiations data underestimate the extent of abuse. In the main, this is because a substantial amount of abuse is not reported to authorities for reasons explained above in section 3.2. In addition, counts of substantiations reflect the legislative and practice arrangements in place, and the proportion of notifications that are investigated. In 2009-10 in Victoria, there were 13,816 investigations of 48,369 notifications (AIHW 2011a). In that year, over half of the notifications that were investigated were substantiated (AIHW 2011a).

3.3.2 Best estimate – prevalence and incidence

Prevalence

The best estimate of prevalence is drawn from self-reports of child physical and sexual abuse by adults based on their recollections of childhood from the Australian Bureau of Statistics (ABS) Personal Safety Survey conducted in 2005 (ABS 2006). The survey has not been updated since the original report.

Incidence

Best estimates of incidence were calculated by factoring up the lower bound incidence estimates for the difference between the substantiation rate (0.6%) and the ABS Personal Safety Survey estimate of one year prevalence (3.671%).

The best estimate also understates the occurrence of abuse because:

- the ABS survey only asked about physical and sexual abuse. Other types of abuse such as emotional and psychological abuse, neglect or witnessing violence were not included in the survey. It was not possible to factor up for other types of abuse because of the lack of useful quantitative information about the co-occurrence of different types of abuse.
- the sample excluded people living in institutions and people living in very remote areas. The former are arguably more likely to have experienced child abuse.
- the survey excluded people who died as a result of abuse.

The survey estimates may have been affected by a number of factors including:

- reliance on recall, which can introduce some uncertainty, particularly in recalling episodes of abuse between the ages of 0-4 years when other data suggests abuse rates are relatively higher than for older ages; and

- sensitivities associated with talking about experience of child abuse (as mentioned above in section 3.2).

3.3.3 Mortality

It was necessary to estimate deaths from abuse or neglect in order to estimate the costs. Mortality associated with child abuse and neglect generates economic and social costs including lost productivity, judicial system costs (coroners' investigations, policy investigations and potential prosecution and incarceration of perpetrators) and health system costs (for example, treatment in hospital prior to death, as well as management and treatment of downstream illness arising from abuse).

Deaths from abuse may occur in the short term because the abuse leads to fatal injuries, or in the longer term because of the downstream physical and mental illnesses or suicide associated with child abuse and neglect.

Fatal abuse is difficult to detect and thus to measure. As an illustration, for young children, Shaken Baby Syndrome and Sudden Infant Death Syndrome, drowning in baths, death from dehydration or malnutrition and failure to ensure treatment for illnesses (which leads to preventable death) are difficult to attribute with confidence to child abuse or neglect.

Deaths rates in children aged 0-14 were based on ABS (2004) data for assault (international classification of disease (ICD) codes X85 to Y09) by gender and age. While T74 and T76 are the ICD codes for child maltreatment, these are not reported by the ABS. As explained in Taylor et al, (2008), while assault may not capture all deaths from abuse, it may also include assault which is accidental or not committed by parents of the dead child.

Deaths attributable to abuse or neglect in childhood for people aged 15 or over drawn from Begg et al (2007). Begg and colleagues estimated deaths attributable to child sexual abuse using Andrews et al (2004). These rates were factored up for the difference between the prevalence of sexual abuse as determined in Andrews et al (2004) and the estimates for prevalence used here. This approach necessarily assumes that death rates attributable to sexual abuse are the same for other types of abuse.

3.4 The costs of abuse

As noted above, child abuse and neglect are associated with many adverse outcomes for the individuals concerned as well as the community more generally. While some children are more resilient than others, and there may be factors in the child's environment which moderate the harm resulting from abuse, consequences of abuse can be severe and long lasting. The literature outlining the consequences of abuse is detailed in Taylor et al, (2008). In brief, child abuse and neglect have been associated with the following.

- physical injury and illness (brain injuries, central nervous system injuries, fractures, reproductive health problems, ocular damage, sexual dysfunction, irritable bowel syndrome, heart disease and other illnesses);
- mental illnesses (including anxiety and depression, eating disorders, high risk sexual behaviour, post traumatic stress disorder and suicide);
- substance misuse;

- debilitated social functioning;
- developmental delay and impairment, cognitive and neurological impairment, low academic achievement;
- poor labour market outcomes;
- delinquency, adult criminal behaviour, subsequent victimisation of children; and
- homelessness and greater rates of use of welfare.

3.4.1 Scope of costs

The scope of the cost estimates in this report is as follows.

- Health system costs including:
 - the costs of treating injuries directly resulting from physical abuse and fatal abuse; and
 - long term (downstream) costs of illnesses and premature death experienced by adults who were abused as children. Types of illnesses included are: suicide, physical injuries, depression, anxiety, and substance misuse (including alcohol and drugs);
- education system costs associated with potentially poorer educational achievement leading to additional assistance required at school;
- productivity losses due to poorer employment and earnings outcomes resulting from lower than average rates of completing Year 12 by children in OOHC;
- justice system costs including:
 - the cost of care and protection orders;
 - Coroner's Court costs of investigating child deaths or suspicious deaths;
 - the costs associated with investigating abuse such as police investigation, prosecution costs and the costs of incarceration of perpetrators of child abuse;
 - victim support; and
 - the costs of crimes committed in cases where children who experienced abuse go on to commit crimes in later life;
- the costs of the child protection system and intensive family support services;
- the costs of greater than average use of crisis accommodation by families in which abuse has occurred, and the cost of greater than average use of public housing by children leaving OOHC;
- deadweight losses associated with additional welfare payments and government expenditures associated with child abuse. While welfare payments are not in themselves economic costs (they are transfer payments), they are associated with efficiency losses (or to use economic terminology — deadweight losses). Deadweight losses reflect the resources required to administer the taxation and welfare systems, the associated costs of compliance activities and the behavioural distortions resulting from the incentives associated with taxation and welfare; and
- last but not least, the loss of wellbeing resulting from child abuse is also estimated here, measured in DALYs.

3.4.2 Caveats and considerations

Limitations to data and evidence mean that there will naturally be a margin of uncertainty surrounding the magnitude of the estimated costs. In particular, there is a paucity of studies with long term follow up of children who experienced abuse or neglect — and the studies that are available have very small sample sizes. Hence, it is very difficult to quantify the long term (or downstream) impact of abuse and neglect and thus capture the costs.

It is also difficult to isolate the extent to which ill health, substance misuse, poor social functioning, adult victimisation, poor employment and earnings outcomes and the other adverse outcomes listed above can be directly attributed to abuse. Risk factors for child abuse and neglect include low socioeconomic status leading to economic stress and disadvantage, poor parental mental health, parental substance misuse, family disruption, and disability of the child. These risk factors for child abuse are themselves associated with the undesirable outcomes above, and hence confound efforts to isolate the impact of abuse. Where possible, the methodology here uses parameters which adjust for confounding factors such as socioeconomic circumstances.

Some children who survive abuse may experience extreme loss of wellbeing but no (or few) financial costs because they do not use health or other support services. For example, children may survive abuse but, as a result, exist with lifelong severe depression for which they never seek treatment. In this report, these cases will be reflected in the loss of wellbeing from depression (counted as DALYs).

3.5 Methods for estimating the costs

The methods used to estimate the costs in this report are briefly described in this section. For more detail and discussion of the literature from which the parameters are drawn, please refer to the original report (Taylor et al, 2008).

3.5.1 Health system expenditure

Prevalence

The original report used unpublished health expenditure data purchased from the AIHW for the health conditions associated with experiencing abuse (mental illness, drug and alcohol abuse, suicide, homicide and violence, and physical injury). The data were for 2000-01 — the most recent available for the Taylor et al, (2008) report. Since no new data were available for this report, the original data were adjusted as follows.

- The original health expenditure estimates were for Australia as a whole so they were factored down according to the Victorian population share in 2000-01 (using detailed data by age and gender). These estimates were then multiplied by health inflation (AIHW 2010) and Victorian population growth by age and gender to 2009-10 (ABS 2010a).

- The attributable fraction (AF)¹ for child sexual abuse used by Begg et al (2007)² was then applied to the health expenditure estimates to obtain the proportion of health expenditure on mental illness, drug and alcohol abuse, suicide, homicide and violence, and physical injury associated with child abuse and neglect.
- Health expenditure was also adjusted for differences in prevalence between Andrews et al (2004) (on which the Begg et al (2007) AF was based) and the current estimates of prevalence in this report.
- The AIHW allocated the health expenditure data by disease, but only around 87.5% of expenditure was able to be allocated by disease. The estimates were therefore factored up to account for the unallocated component.

Notably, the health system costs of abuse and neglect estimated in the original report (Taylor et al, 2008) were in the range of estimates found by other studies. However, use of 2000-01 health expenditure data does not allow for changes in utilisation of health services which may have occurred since then, or allow for advances in medical technology which may have changed the clinical pathways or the costs of treating the physical and mental illnesses associated with abuse.

Incidence

The incidence cost estimate was generated by calculating the health system cost per person by age and gender from the prevalence cost and the underlying prevalence estimates, and using this to generate a stream of health system costs over an abused person's lifetime to estimate the NPV of health system costs — discounted back to 2009-10 and applied to all of those abused for the first time in 2009-10.

3.5.2 Education system

Prevalence

A number of studies have found that children in OOHC have poorer educational outcomes than other children. However, the literature review by Stone (2007) noted the importance of socioeconomic status as a risk factor for requiring special educational assistance, citing at least one study finding that, compared to other socio-economically vulnerable children, maltreated children are no more likely to be placed in special education.

The costs of additional education provided to children experiencing abuse and neglect were estimated as follows.

- The largest component of the cost of additional education assistance relates to Australian Government expenditure on the 'Literacy, Numeracy and Special Learning Needs' program (Department of Education Employment and Workplace Relations, 2010) and Victorian Government funding for Student Welfare and Support (Victorian Portfolio Budget papers). To derive the proportion of funding on these programs

¹ The AF is the proportion of a disease or condition that would be reduced if a risk factor (child abuse) were removed.

² Using Andrews et al (2004).

attributable to abuse and/or neglect, the relative risks from Smithgall et al (2004)³ were applied to the prevalence of child abuse to adjust for socioeconomic circumstances.

- Expenditure on two voucher programs was also included, although this is the minor part of the cost of educational assistance.
 - The Australian Government 'Even Start' voucher payment was multiplied by the difference in the proportion of all children who achieved learning benchmarks and children on guardianship and custody orders who achieved the benchmarks at ages 8, 10 and 12 years old (AIHW 2007 and SCRGSP 2006) multiplied by the prevalence (or incidence) of abuse.
 - Expenditure on the Victorian Government School Start payment was estimated as the individual payment multiplied by the number of children in OOHC of school age.

Incidence

For Australian Government expenditure on the 'Literacy, Numeracy and Special Learning Needs' program and Victorian Government funding for Student Welfare and Support, the incidence cost was estimated by deriving a cost per child from the prevalence costs, and calculating the NPV of the cost per child per year over the relevant number of school years remaining. The costs were only applied to incidence estimates for children of school age (i.e. 5 to 17 years old).

For the voucher programs, the same method was applied as for prevalence above, but applied to incidence estimates for the relevant ages.

3.5.3 Productivity losses

Children leaving OOHC have been found to be less likely than average to complete year 12 and are thus more likely than average to experience lower than average employment rates and lower than average wages. In addition, productivity losses arise from premature death resulting from abuse and neglect — as these people would otherwise have been able to enter the workforce with the same probability as other Australians.

While a number of studies show that children in OOHC achieve lower levels of educational attainment than average, few studies adjust for other important influences on educational outcomes such as parental education and income, school characteristics, and disability. A high proportion of children subject to abuse grow up in poorer socioeconomic circumstances and evidence suggests that children with a disability are also more likely to be abused. International studies suggest outcomes for those in OOHC remain below par even when adjustments are made for socioeconomic status. It is not clear whether these

³ Smithgall et al (2004) found that children experiencing abuse or neglect were more likely to be classified as having a learning disability, emotional disorder or another type of disability for the purposes of receiving special education than those who did not, even when adjusted for demographic/socioeconomic controls. They examined a group of children in OOHC in Chicago and compared them with three other groups of children: those who attended a Chicago public school but never experienced a substantiated report of abuse and neglect, those who were abused and neglected but not placed in OOHC, and those who had once been in OOHC but were currently in a permanent placement. All three groups of children attended schools in poorer neighbourhoods with lower academic achievement records.

results can be applied more generally to all of those who have been abused, but Bruce and Gordon (2007)⁴ suggest not.

The costs in this report were estimated using the difference between the proportion of children leaving OOHC who failed to complete year 12 (Cashmore and Paxman 2007) and the Australian average for the same year (ABS 1997) adjusted for socioeconomic status using Smithgall et al (2004). The impact on an individual's wage and probability of employment of not completing high school was based on Breusch and Gray (2004).⁵

Prevalence

To estimate the productivity losses for children abused in 2009-10 (prevalence), the loss in earnings over the child's lifetime due to child abuse (by gender and age) was discounted back to the current year using a discount rate of 3% per annum and then divided by number of years to retirement by age and gender to obtain the loss in earnings for one year and then multiplied by the number of children abused in 2009-10. The most recent data for earnings and employment rates were used for the calculations (ABS 2010b and ABS 2010c),

Incidence

To estimate the productivity losses for children abused for the first time in 2009-10 (incidence), the loss in earnings over the child's lifetime due to child abuse (by gender and age) was discounted back to the current year using a discount rate of 3% per annum and multiplied by the number of children abused for the first time in 2009-10.

3.5.4 Justice system

Care and protection orders

The **prevalence** estimate was based on expenditure on Children's Court civil functions (SCRGSP 2011) factored down for non-relevant areas based on advice from the Children's Court (personal communication, Children's Court, 22 August 2011) which recommended using 85% of civil expenditure.

The **incidence** estimate was generated by calculating expenditure (using the prevalence expenditure) per order (SCRGSP 2011 and AIHW 2011a) multiplied by children admitted to orders in 2009-10 (AIHW 2011a).

Coroner's court

Total expenditure on the Coroner's court was multiplied by the proportion of all deaths reported to the Coroner suspected of being family related (Coroner's Court of Victoria 2011). The cost is the same for both **incidence** and **prevalence**.

⁴ Bruce and Gordon (2007), who used data from a Canadian population survey and who also adjusted for socioeconomic status, found that sexual abuse was not associated with lower educational levels or lower adult incomes among victims — i.e. victims' responses to abuse fell into a spectrum, with some victims outperforming the average and others underperforming.

⁵ Please refer to Taylor et al (2008) for more detail.

Crime — Police

To estimate the **prevalence** cost, total expenditure on police (SCRGSP 2011) was factored down to focus on crime (excluding other police activities such as traffic direction) (based on Mayhew 2003). The proportion of police expenditure on crime allocated to child abuse and neglect was based on victims of homicide, assault, sexual assault, kidnap and dangerous or negligent acts endangering persons aged 0-17 as a proportion of total victims of these crimes (ABS 2010d).

To determine the **incidence** cost, the prevalence cost was factored to reflect the proportion of children experiencing abuse for the first time in 2009-10 using the same parameter for repeat abuse described in section 3.3.1 (26.5%).

Crime — Prosecution of perpetrators

The **prevalence** costs of prosecution were calculated as the product of the following.

- the number of defendants with adjudicated finalisations for homicide, assault, sexual assault, kidnap and dangerous or negligent acts endangering persons;
- the number of victims of homicide, assault, sexual assault, kidnap and dangerous or negligent acts endangering persons aged 0-17 as a proportion of total victims of these crimes (ABS 2011 and ABS 2010d); and
- expenditure on criminal court activity in the Magistrates', Supreme, and District Courts (from SCRGSP 2011).

To determine the **incidence** cost, the prevalence cost was factored to reflect the proportion of children experiencing abuse for the first time in 2009-10 using the same parameter for repeat abuse described in section 3.3.1 (26.5%).

Crime — Incarceration of perpetrators

For the **prevalence** cost, the number of prisoners for offences related to child abuse and neglect (ABS 2009) was divided by the total number of prisoners (ABS 2009) multiplied by the proportion of victims who were aged under 18 and multiplied by recurrent expenditure on prisons (SCRGSP 2011).

To determine the **incidence** cost, the prevalence cost was factored to reflect the proportion of children experiencing abuse for the first time in 2009-10 using the same parameter for repeat abuse described in section 3.3.1 (26.5%).

Crime — Victim support

To estimate the **prevalence** cost, estimates of Victorian Government expenditure on family violence services and sexual assault support services (unpublished data from the Victorian Government Department of Premier and Cabinet) were multiplied by the number of victims of homicide, assault, sexual assault, kidnap and dangerous or negligent acts endangering persons aged 0-17 who were related to the offender as a proportion of total victims of these crimes (ABS 2010d).

To determine the **incidence** cost, the prevalence cost was factored to reflect the proportion of children experiencing abuse for the first time in 2009-10 using the same parameter for repeat abuse described in section 3.3.1 (26.5%).

Crime — Second round impacts

For the **prevalence** cost, the expected number of crimes (by type) committed by those who experienced abuse during childhood were estimated using Currie and Tekin (2006)⁶ and multiplied by the average cost of crime (by type) in Australia estimated by Mayhew (2003). The costs of crime were factored up using the consumer price index (RBA 2011).

To determine the **incidence** cost, the prevalence cost was factored to reflect the proportion of children experiencing abuse for the first time in 2009-10 using the same parameter for repeat abuse described in section 3.3.1 (26.5%).

Notably, these estimates have not been adjusted for the many potential confounding factors such as poor socioeconomic environment, antisocial parents and siblings, poor parental supervision or harsh/erratic parenting.

3.5.5 Child protection and intensive family support

Prevalence

The prevalence estimates include Victorian Government expenditure on child protection, OOHC and intensive family support services (SCRGSP 2011), Victorian Government expenditure on 'Responding to critical needs in child protection' (Department of Human Services (DHS) 2010) and expenditure on children's advocacy by the Office of Child Safety Commissioner (Office of Child Safety Commissioner 2010). Not all of Office of Child Safety Commissioner expenditure can be attributed to child abuse and neglect but the actual proportion is unclear.

Incidence

The incidence estimates were calculated by estimating the cost per child in OOHC multiplied by the NPV of this cost over the average time spent in a continuous OOHC placement (3.5 years from AIHW 2011a) and applying this to children in OOHC in June 2010 (AIHW 2011a).

3.5.6 Public housing

Prevalence

Estimates of the costs associated with greater rates of use of public housing by those who experienced abuse or neglect were not included in Taylor et al, 2008. For this report, the cost estimate was based on the proportion of those leaving OOHC who move into public housing from Raman et al (2005). The number of Victorian children discharged from OOHC

⁶ Currie and Tekin (2006) analysed data from the National Longitudinal Study of Adolescent Health for causal links between childhood maltreatment and crime. The study found that maltreatment in childhood approximately doubles the risk of engaging in criminal activities. Types of crimes included armed robbery, burglary, damaged property, assault, and theft.

in 2009-10 who move into public housing was multiplied by the average cost of public housing per household (SCRGSP 2011). Data for the number of public housing households in Victoria and total Victorian households were drawn from the SCRGSP (2011) and ABS (2010e) respectively.

Incidence

For incidence, it was assumed that the average time spent in public housing by those exiting OOH in 2009-10 was seven years.

3.5.7 Supported Accommodation and Assistance (SAAP)

Prevalence

The prevalence cost was estimated by multiplying SAAP expenditure (SCRGSP 2011) by the proportion of support periods where the main reason for seeking assistance was domestic family violence, sexual abuse or physical/emotional abuse (AIHW 2011b). The product was further multiplied by the proportion of support periods provided to children aged 0-17 years (AIHW 2011b). Lastly, the result was multiplied by unmet need for supported accommodation assistance as measured by the AIHW (2011b).

The split between Victorian and Commonwealth expenditure was estimated based on the SAAP V Multilateral Agreement (2005).

Incidence

The prevalence cost was factored down for the proportion of children experiencing abuse for the first time in 2009-10 to calculate the incidence cost.

3.5.8 Deadweight losses⁷

The same approach was applied to estimate both **incidence** and **prevalence** costs.

The rate of deadweight losses per dollar was multiplied by the sum of tax forgone and government spending attributable to child abuse (including additional welfare payments) resulting from child abuse and neglect.

Deadweight loss rates were estimated as 28.75% based on a study cited in Lattimore (1997) together with Deloitte Access Economics estimates of government administration as a proportion of outlays.

Taxes foregone were estimated using income and indirect tax rates from the Deloitte Access Economics' Macroeconomic Model.

Additional welfare payments attributable to child abuse and neglect were based on the increased likelihood of requiring welfare found in Cashmore and Paxman (2007)⁸ and

⁷ The costs of administering taxes and transfer payments, associated compliance activities by the community and behavioural distortions resulting from the incentives caused by tax and transfer systems.

⁸ Cashmore and Paxman (2007) found that children who enter 'out-of-home care' arrangements are 2.01 times more likely to require Austudy, Newstart allowance, sickness allowance and parenting payments.

applied only to children in OOHC. Welfare payments were inflated from the original report using ABS (2010f).

3.5.9 Loss of wellbeing (burden of disease)

The loss of wellbeing and premature mortality – called the ‘burden of disease and injury’ – are measured in terms of disability adjusted life years (DALYs). A DALY of 0 represents a year of perfect health, while a DALY of 1 represents death. Other health states are attributed values between 0 and 1 as assessed by experts on the basis of literature and other evidence of the quality of life in relative health states. For example, the *disability weight* of 0.18 for a broken wrist can be interpreted as losing 18% of a person’s quality of life relative to perfect health, because of the inflicted injury. Total DALYs lost from a condition are the sum of the mortality and morbidity components – the year(s) of life lost due to premature death (YLLs) and the year(s) of healthy life lost due to disability (YLDs).

Prevalence

The DALYs attributable to child abuse and neglect were estimated using the following parameters.

- The attributable fraction (AF)⁹ for child sexual abuse used by Begg et al (2007)¹⁰ was applied to the burden of disease from Begg et al (2007) for mental illness, drug and alcohol abuse, suicide, homicide and violence, and physical injury.
- The DALY estimates were also adjusted for differences in prevalence between Andrews et al (2004) (on which the Begg et al 2007 AF was based) and the current estimates in this report.
- The original DALY estimates for Australia from Begg et al (2007) were factored down according to the Victorian population share in 2003 (the year to which the Begg et al 2007 relate). These estimates were then multiplied by Victorian population growth by age and gender to 2009-10 (ABS 2010a).

Incidence

The incidence estimate was generated using the prevalence estimate as a base and assuming the same ratio of incidence to prevalence found in the original report.

Monetary value of DALYs

The loss of wellbeing was converted to a monetary value using the Commonwealth Department of Finance and Deregulation, Office of Best Practice Regulation estimate of the value of a statistical life year (VSLY). The VSLY estimate for the year 2007 was \$151,000, and has been factored up using CPI to \$159,866 in 2009-10.

⁹ The AF is the proportion of a disease or condition that would be reduced if a risk factor (child abuse) were removed.

¹⁰ Using Andrews et al (2004).

4 Incidence, prevalence and mortality

The purpose of this chapter is to provide estimates of the incidence and prevalence of child abuse and neglect, and mortality associated with child abuse and neglect, on which to base the estimates of financial and non-financial costs.

As explained in section 3.2, there is much uncertainty surrounding estimates of the occurrence of child abuse and neglect, so a lower bound and a best estimate are reported here. Both are conservative. The methodology and data sources used to estimate the prevalence and incidence of abuse are described in section 3.3 (and in more detail in Taylor et al 2008). In summary:

- the lower bound is based on children in substantiations in 2009-10. Substantiations data underestimate the extent of abuse because a substantial amount of abuse is not reported to authorities, and only a proportion of notifications are investigated.
- the best estimate is based on a population survey conducted by the ABS in 2005 (ABS 2006). This estimate is also conservative because respondents were only asked about physical and sexual abuse (which excludes emotional or psychological abuse, neglect, and witnessing domestic violence). Moreover, the survey asked adults to recall their experience of abuse in childhood and so estimates of abuse occurring among young children when rates of abuse are likely to be highest — are probably unreliable. The sample excluded people who died as a result of their abuse and also excluded people living in institutions (e.g. prisons and psychiatric hospitals) who are arguably more likely to have experienced child abuse.

4.1 Prevalence

In 2009-10 in Victoria, it is estimated that at least 7,340 children experienced abuse (Table 4.1), with a best estimate of 44,740 children (Table 4.2). These figures are conservative and indicate the likely magnitude of the problem.

Table 4.1: Number children abused or neglected in 2009-10, Lower bound, Victoria

Age	Number of children				Rate per 1,000		
	Males	Females	Persons		Males	Females	Persons
<1 year	550	570	1,120		15	16	16
1–4 years	930	910	1,840		7	7	7
5–9 years	940	880	1,820		6	6	6
10–14 years	960	1,000	1,960		6	6	6
15–17 years	240	350	590		2	3	3
0–17 years	3,630	3,710	7,340		6	6	6

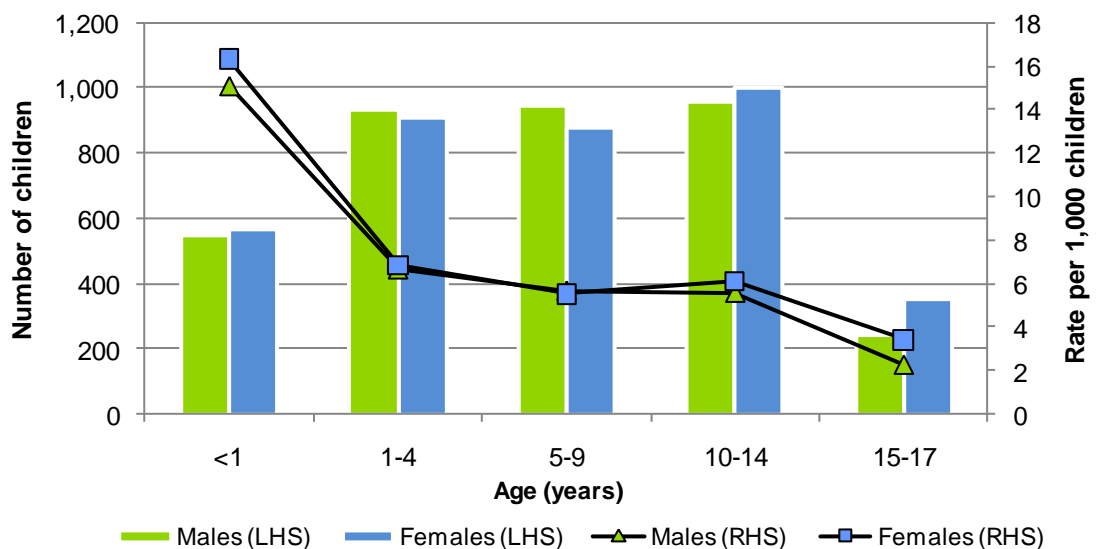
Numbers have been rounded and may not add to the add total. For the Victorian population underlying these estimates, see Appendix A.

Table 4.2: Number children abused or neglected in 2009-10, Best estimate, Victoria

Age	Number of children			Rate per 1,000		
	Males	Females	Persons	Males	Females	Persons
<1 year	1,340	1,270	2,610	37	37	37
1–4 years	5,160	4,900	10,060	37	37	37
5–9 years	6,130	5,830	11,960	37	37	37
10–14 years	6,350	6,000	12,350	37	37	37
15–17 years	3,980	3,780	7,760	37	37	37
0–17 years	22,960	21,780	44,740	37	37	37

Numbers have been rounded and may not add to the total. For the Victorian population underlying these estimates, see Appendix A.

The lower bound prevalence rates and numbers of children are depicted in Chart 4.1. Rates are on the right hand axis and numbers on the left hand axis. The chart highlights that the highest rates of substantiated abuse are for children aged less than one year old.

Chart 4.1: Prevalence of child abuse by age and gender — lower bound, Victoria

4.2 Incidence

In 2009-10 in Victoria, it is estimated that at least 5,390 children experienced abused for the first time (Table 4.3), with a best estimate of 32,850 children experiencing abuse for the first time (Table 4.4).

Table 4.3: New cases of abuse or neglect in 2009-10, Lower bound, Victoria

Age	Number of children				Rate per 1,000 Children		
	Males	Females	Persons		Males	Females	Persons
<1 year	400	420	820		11	12	12
1–4 years	680	670	1,350		5	5	5
5–9 years	690	640	1,340		4	4	4
10–14 years	710	740	1,440		4	5	4
15–17 years	180	260	440		2	3	2
0–17 years	2,670	2,720	5,390		4	5	4

Numbers have been rounded and may not add to the total. For the Victorian population underlying these estimates, see Appendix A.

Table 4.4: New cases of abuse or neglect in 2009-10, Best estimate, Victoria

Age	Number of children				Rate per 1,000 Children		
	Males	Females	Persons		Males	Females	Persons
<1 year	2,470	2,540	5,000		68	73	70
1–4 years	4,170	4,080	8,250		30	31	30
5–9 years	4,230	3,920	8,150		25	25	25
10–14 years	4,300	4,490	8,790		25	27	26
15–17 years	1,080	1,570	2,660		10	15	13
0–17 years	16,250	16,600	32,850		26	28	27

Numbers have been rounded and may not add to the total. For the Victorian population underlying these estimates, see Appendix A.

4.3 Mortality

Fatal abuse is difficult to detect and thus to measure, so the estimates here of deaths attributable to abuse and neglect need to be interpreted with care. There is substantial uncertainty around the number deaths which are attributable to child abuse — as explained earlier in section 3.3.3 and in Taylor et al, 2008. That said, it is necessary to approximate the number of deaths attributable to abuse in order to estimate the costs of abuse and neglect. The method for estimating abuse related deaths used here suggests that, in 2009-10 in Victoria, there were approximately 67 deaths attributable to child abuse and neglect — including deaths of adults who were abused as children.

Table 4.5: Deaths from child abuse and neglect, Victoria, 2009-10

Age	Number of deaths		
	Males	Females	Persons
Total	32	34	67

For the Victorian population underlying these estimates, see Appendix A.

4.4 Indicators of severity of harm

It has not been possible to present estimates which reflect the spectrum of severity of harm resulting from abuse and neglect. This is unfortunate because some children experience extreme harm (including premature death, severe disability, and severe depression) and for these individuals the costs of abuse are very high. However, it is difficult to predict the severity of harm based on the type or nature of abuse. Severity of harm depends somewhat on the nature of the child, his or her resilience and predisposition to anxiety or other health issues and the presence of factors in the child's environment which moderate the harm resulting from abuse (e.g. a child may develop strong and stable bonds to one or more non-parental care figures). It is difficult to compare and predict the impact of a severe physical injury experienced on one occasion with frequent milder physical injuries experienced together with emotional abuse or neglect (Goddard et al, 2002).

In addition, for many of the cost components, the data and evidence available do not allow the systematic adjustment of costs to account for different degrees of, or severity of, harm. Identifying, documenting and recording the harm from abuse has so far proved difficult and thus there is a paucity of data about the distribution of harm by severity.

Some indicators of the numbers of children experiencing severe harm from abuse which are available from administrative data sets are presented below. These indicators should not be viewed as comprehensive nor accurate measures of all children experiencing severe harm from abuse.

4.4.1 Hospitalisations for child abuse or neglect

In 2009-10, Australia-wide there were 96 hospitalisations attributed to child abuse and neglect (Table 4.6). Data for Victoria are not publicly available. It is important to note that these counts depend critically on the nature of the codes used — some children subject to maltreatment may have their hospitalisation coded to a fall (for example) or some other diagnosis.

Table 4.6: Hospitalisations for child abuse and neglect (Australia)

Age (years)	<1	1-4	5-9	10-14	15-19	Total
2008-09						
Male	24	14	4	3	1	46
Female	18	19	9	18	23	87
Total	42	33	13	21	24	133
2009-10						
Male	10	13	5	5	2	35
Female	14	11	3	12	21	61
Total	24	24	8	17	23	96

Source: AIHW national hospital morbidity data base on line, ICD Diagnosis T74 Maltreatment syndromes

4.4.2 Children who were victims of serious crimes committed by a family member

In 2010, there were 1,188 children and young people aged 0 to 19 who were victims of assault for whom the offender was a family member, and 456 victims of sexual assault for whom the offender was a family member (ABS 2010d).

4.4.3 Out-of-home care and placement instability

As noted in the original report (Taylor et al 2008), research suggests that there is a strong link between sustained placement instability or disruption — especially instability lasting for more than 12 months — and relatively worse outcomes for children (studies cited in Osborn and Bromfield 2007). In Victoria in 2009-10:

- 141 Victorian children on a care and protection order and exiting care after less than 12 months had three or more placements (21.9% of children in this category) (SCRGSP 2011); and
- 367 Victorian children on a care and protection order and exiting care after 12 months had three or more placements (50.6% of children in this category) (SCRGSP 2011).

5 Prevalence costs

The methodology and data sources used to estimate the prevalence costs are described in section 3.3 (and in more detail in Taylor et al 2008). Only the findings are presented here.

5.1 Health system

The health system costs associated with child abuse and neglect in Victoria in 2009-10 were at least \$20.4 million with a best estimate of \$124.2 million. The costs by gender are in Table 5.1. Most of the costs related to depression and anxiety (nearly 60%) with the residual reflecting suicide, physical injuries, and substance misuse (Table 5.2).

Table 5.1: Health system costs by gender — prevalence (\$'000 2009-10)

	Lower bound	Best estimate
Males	4,797	29,247
Females	15,569	94,917
Persons	20,367	124,164

Numbers have been rounded and may not add to the total.

Table 5.2: Health system costs by condition — prevalence (\$'000 2009-10)

	Lower bound	Best estimate
Short term health effects		
Assault	3,278	19,984
Long term health effects		
Homicide	65	395
Suicide	412	2,510
Physical Injury	3,968	24,192
Depression	8,917	54,359
Anxiety	3,124	19,046
Alcohol	354	2,159
Drug Use	249	1,519
Total Long term	17,089	104,181
Total	20,367	124,164

Numbers have been rounded and may not add to the total.

As shown in Table 5.3, the Australian Government bears the majority of these costs (43%), followed by the Victorian Government (27%). Individuals incurred 17% of these costs.

Table 5.3: Health costs by bearer — lower bound and Best estimate prevalence, Victoria (\$'000 2009-10)

Lower bound	Australian Government	State/Territory Government	Health Insurance funds	Individuals	Other non government	Total
Short term health effects						
Assault	1,416	869	256	551	187	3,278
Long term health effects						
Homicide	28	17	5	11	4	65
Suicide	178	109	32	69	23	412
Physical Injury	1,714	1,052	310	667	226	3,968
Depression	3,852	2,363	695	1,498	508	8,917
Anxiety	1,350	828	244	525	178	3,124
Alcohol	153	94	28	60	20	354
Drug Use	108	66	19	42	14	249
Total Long term	7,382	4,529	1,333	2,871	974	17,089
Total	8,798	5,397	1,589	3,422	1,161	20,367
Proportion	43%	27%	8%	17%	6%	100%

Best estimate	Australian Government	State/Territory Government	Health Insurance funds	Individuals	Other non government	Total
Short term health effects						
Assault	8,633	5,296	1,559	3,357	1,139	19,984
Long term health effects						
Homicide	170	105	31	66	22	395
Suicide	1,084	665	196	422	143	2,510
Physical Injury	10,451	6,411	1,887	4,064	1,379	24,192
Depression	23,483	14,405	4,240	9,132	3,098	54,359
Anxiety	8,228	5,047	1,486	3,200	1,086	19,046
Alcohol	933	572	168	363	123	2,159
Drug Use	656	403	119	255	87	1,519
Total Long term	45,006	27,608	8,126	17,502	5,938	104,181
Total	53,639	32,904	9,685	20,860	7,077	124,164
Proportion	43%	27%	8%	17%	6%	100%

5.2 Additional education

The costs of additional education in 2009-10 for children who experienced abuse and neglect in Victoria were between \$3.5 million and \$14.9 million (Table 5.4).

Table 5.4: Prevalence costs of additional education (\$'000 2009-10)

	lower bound	Best estimate
Australian Government Vouchers (An Even Start)	172	940
Australian Government spending in Victoria on LNSLN program	574	3,500
Victorian government School Start payment	1,268	1,268
Victorian Government funding for Student Welfare and Support	1,502	9,155
Total	3,516	14,864

5.3 Productivity losses

5.3.1 Lower employment

Children in OOHC are less likely than those of their age to be employed and if they are employed, they are likely to receive lower weekly earnings on average. These costs for Victoria are in Table 5.5— a lower bound of just under \$1.0 million and a best estimate of \$1.8 million.

Table 5.5: Productivity losses — prevalence cost (\$'000 2009-10)

Age group	Lower bound			Best estimate		
	Males	Females	Total	Males	Females	Total
Total	647	342	989	1,147	605	1,753

5.3.2 Premature death

In 2009-10, around \$1.8 million in productivity losses occurred because of premature death associated with child abuse and neglect in Victoria — for males, the losses were around \$1.2 million and for females, the losses were around \$644,000.

5.3.3 Tax forgone

The proportion of these productivity losses borne by governments in income taxes and indirect taxes¹¹ forgone is shown in Table 5.6. In total, a lower bound estimate of around \$311,500, a best estimate of around \$552,000 and taxes forgone because of premature mortality of around \$573,400.

¹¹ Indirect tax covers consumption taxes, and includes GST, sales tax, gambling taxes, motor vehicle taxes, insurance taxes and excise tax.

Income taxes represent Commonwealth government revenue forgone and indirect taxes are predominantly state revenue forgone.

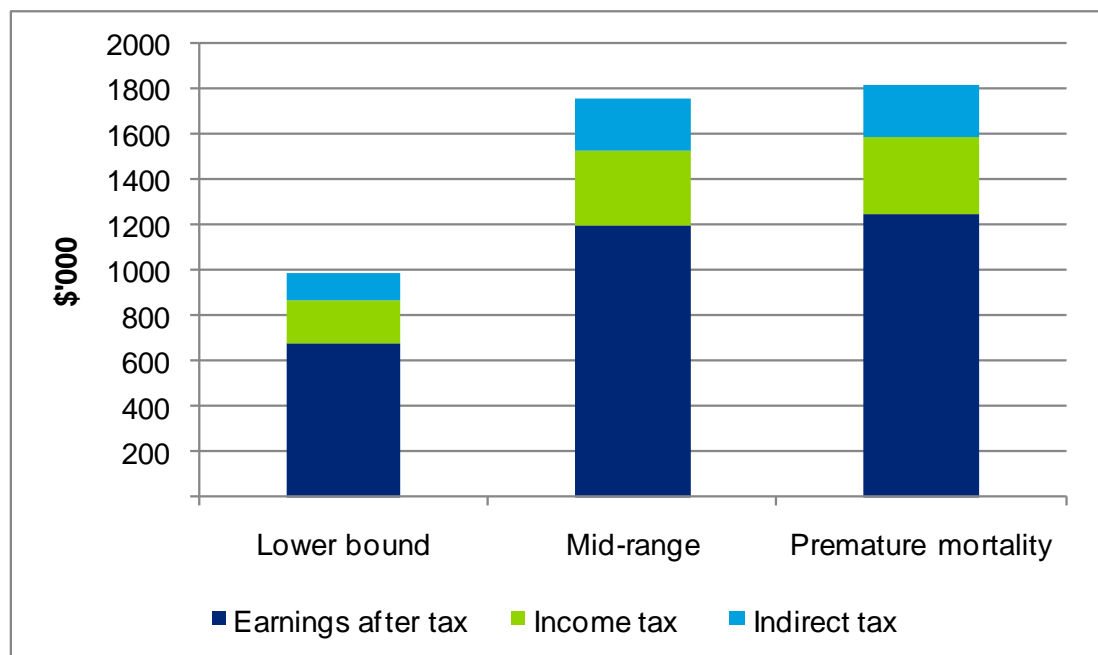
- Commonwealth revenue forgone was between \$187,000 and \$331,000, and from premature mortality, a further \$344,000.
- Victorian government revenue forgone was between \$125,000 and \$221,000, and a further \$229,000 due to premature mortality.

Table 5.6: Tax forgone (\$'000 2009-10)

	Lower bound		Best estimate		Premature mortality	
	Males	Females	Males	Females	Males	Females
Income tax (Commonwealth)	122	65	217	114	222	122
Indirect tax (Victoria)	82	43	145	76	148	81
Total tax	204	108	361	191	370	203

Productivity losses with indirect and income tax components are shown in Chart 5.1.

Chart 5.1: Productivity losses —prevalence, 2009-10



5.4 Crime and courts

The costs to the justice system in 2009-10 of child abuse were \$103.5 million. These costs are borne by the Victorian Government (Table 5.7).

Table 5.7: Costs to the justice system of child abuse and neglect, Victoria, 2009-10

Type of expenditure	Cost(\$'000)
Victim support (family violence)	298
Victim support (sexual abuse)	2,575
Children's Court (care and protection orders)	6,419
Coroner's court	60
Prosecution of perpetrators	5,807
Police	48,392
Incarceration of perpetrators	39,946
Total	103,498

Second generation crime refers to criminal activity later in life by Victorian adults who were abused as children. (Various studies discussed in Taylor et al (2008) suggest that some children who have been abused take up criminal activity later in life.) The costs of second generation crime are estimated at between \$354,000 and \$2.2 million (Table 5.8).

Table 5.8: Second generation crime, (\$'000 2009-10)

Lower bound	Best estimate
354	2,157

5.5 Child protection, public Housing and SAAP

Victorian Government outlays on child protection, OOHC, intensive family support and the Office of the Child Safety Commissioner in 2009-10 were \$518.1 million. The cost of public housing for children discharged from care in 2009-10 was approximately \$3.9 million. SAAP funding attributable to child abuse and neglect was approximately \$16.3 million, of which the Victorian Government share was \$7.3 million.

Table 5.9: Prevalence costs of child protection and care, public housing and SAAP

Type of cost	\$'000 2009-10
Child protection, OOHC, intensive family support and Child Safety Commissioner	518,128
Public housing for children leaving out of home care in 2009-10	3,942
SAAP funding attributed to child abuse and neglect	16,297

5.6 Deadweight losses

Efficiency losses associated with taxes and transfer payments in 2009-10 arising because of abuse or neglect are shown in Table 5.10. The methodology for estimating these is discussed in section 3.5.8. The lower bound estimate totalled \$207.7 million and the best estimate was around \$241.4 million. Note that welfare estimates are attributed to children leaving OOHC in 2009-10 which are fixed (i.e. the same for both the lower bound and best

estimate), the welfare estimates remain the same for the lower bound and the best estimate.

Table 5.10: Deadweight/efficiency losses — prevalence, (\$'000 2009-10)

	lower bound	Best estimate
Health expenditure	5,855	35,697
Education	1,011	4,273
Productivity losses	254	324
Protection and support	148,962	148,962
Public housing & SAAP	5,819	5,819
Crime	29,857	30,376
Welfare	15,923	15,923
Total	207,682	241,374

5.7 Burden of disease

Most of the loss of wellbeing and premature mortality associated with child abuse derives from fatal abuse, suicide and depression and anxiety (Table 5.11 and Table 5.12). The lower bound estimate for DALYs is 1,380 and the best estimate is 6,870. The burden of child abuse is experienced throughout the life span (Chart 5.2).

Table 5.11: Burden of disease — prevalence lower bound, 2009-10

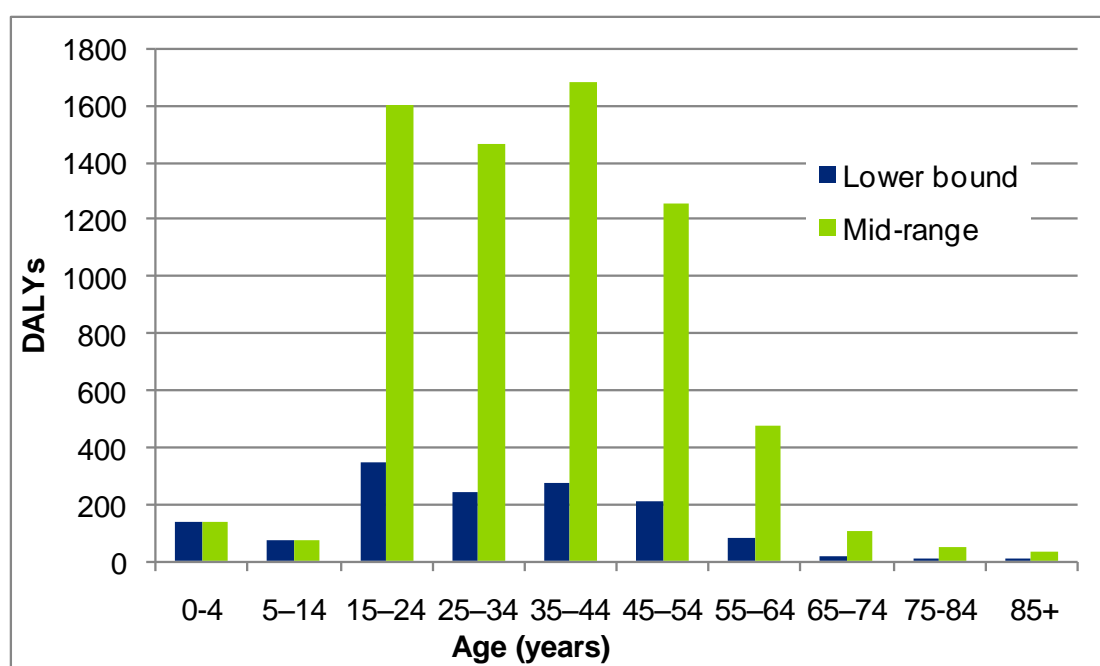
	YLDs	YLLs	DALYs
Short term impacts			
Assault	10	300	310
Long term impacts			
Homicide	0	5	5
Suicide	0	100	100
Physical injuries	5	10	10
Depression & Anxiety	870	0	875
Alcohol	20	15	30
Drug use	10	5	20
Other	10	20	30
Total child abuse and neglect	930	460	1,380

Numbers have been rounded and may not add to the totals.

Table 5.12: Burden of disease — prevalence best estimate, 2009-10

	YLDs	YLLs	DALYs
Short term impacts			
Assault	10	300	310
Long term impacts			
Homicide	10	20	20
Suicide	10	620	630
Physical injuries	30	60	80
Depression & Anxiety	5,320	10	5,330
Alcohol	110	91	200
Drug use	80	30	110
Other	40	140	180
Total child abuse and neglect	5,600	1,260	6,870

Numbers have been rounded and may not add to the totals.

Chart 5.2: DALYs by age — prevalence

5.7.2 Monetary value of the burden of disease

Converting the burden of disease to a monetary value provides a point of comparison with the financial costs, however, these monetary values cannot be added to financial costs. The lower bound value of the burden of disease associated with child and abuse and neglect in Victoria 009-10 is \$221 million and the best estimate is approximately \$1.1 billion.

6 Incidence costs

The methodology and data sources used to estimate the prevalence costs are described in section 3.3 (and in more detail in Taylor et al 2008). Only the findings are presented here.

6.1 Health system

The incidence costs of abuse which occurred for the first time in Victoria in 2009-10 were between \$29.8 million (Table 6.1) and \$187.7 million (Table 6.2).

Table 6.1: Incidence health system costs, Lower bound, (\$'000 2009-10)

Age group	Males	Females	Persons
0-4 years	6,280	8,009	14,288
5-14 years	5,109	8,373	13,482
15-17 years	331	1,680	2,011
Total	11,719	18,061	29,781

Numbers have been rounded and may not add to the totals.

Table 6.2: Incidence health system costs, Best estimate, (\$'000 2009-10)

Age group	Males	Females	Persons
0-4 years	43,775	53,915	97,689
5-14 years	29,279	48,960	78,238
15-17 years	1,929	9,803	11,732
Total	74,983	112,677	187,660

Numbers have been rounded and may not add to the totals.

The Australian Government incurs the greatest share of health system costs of child abuse and neglect, followed by the Victorian Government (Table 6.3).

Table 6.3: Who bears the health system costs — incidence, (\$'000 2009-10)

	Per cent	Lower bound	Best estimate
Australian Government	43%	12,865	81,069
Victorian Government	27%	7,892	49,730
Total government	70%	20,757	130,799
Other(a)	30%	9,024	56,861

(a) Health insurance, individuals and other non-government.

6.2 Additional education

The costs of additional programs required to assist Victorian children who were abused or neglected for the first time in 2009-10 were between \$6.4 million and \$38.7 million.

Table 6.4: Incidence education costs, (\$'000 2009-10)

Program	Lower bound	Best estimate
Australian Government Vouchers (An Even Start)	187	988
Australian Government spending in Victoria on LNSLN program	1,688	10,291
Victorian government School Start payment	81	496
Victorian Government funding for Student Welfare and Support	4,415	26,917
Total	6,372	38,693

Numbers have been rounded and may not add to the totals.

6.3 Productivity losses

6.3.1 Lower employment

Children in out of home care are less likely than other children of their age to be employed and if they are employed, they are likely to receive lower weekly earnings on average. These costs over the lifetime for those whose abuse occurred for the first time in 2009-10 are in Table 6.5 — a lower bound of \$11 million and a best estimate of \$67 million.

Table 6.5: Productivity losses due to child abuse and neglect — incidence cost, (\$'000 2009-10)

Age group	Lower bound			Best estimate		
	Males	Females	Persons	Males	Females	Persons
Total	7,227	3,788	11,015	44,059	23,091	67,150

6.3.2 Premature death

Around \$37 million in productivity losses occurred because of premature death associated with child abuse and neglect which occurred for the first time in 2009-10 — for males, the losses were around \$25.2 million and for females, the losses were around \$11.9 million.

6.3.3 Tax forgone

The proportion of these productivity losses borne by governments in income taxes and indirect taxes¹² forgone is shown in Table 6.6. In total, the lower bound estimate was \$3.5 million, the best estimate was \$21.2 million and taxes forgone because of premature mortality were around \$11.7 million.

¹² Indirect tax covers consumption taxes, and includes GST, sales tax, gambling taxes, motor vehicle taxes, insurance taxes and excise tax.

Income taxes represent Commonwealth government revenue forgone and indirect taxes are predominantly state revenue forgone.

- Commonwealth revenue forgone was between \$2 million and \$12.7 million, and from premature mortality, a further \$7 million.
- Victorian government revenue forgone was between \$1.4 and \$8.5 million, and a further \$4.7 million due to premature mortality.

Table 6.6: Tax forgone, (\$'000 2009-10)

	Lower bound		Best estimate		Premature mortality	
	Males	Females	Males	Females	Males	Females
Income tax (Commonwealth)	1,366	716	8,327	4,364	4,769	2,240
Indirect tax (Victoria)	911	477	5,551	2,910	3,179	1,494
Total tax forgone	2,277	1,193	13,879	7,274	7,948	3,734

Numbers have been rounded and may not add to the totals.

6.4 Courts and crime

The costs to the justice system of abuse occurring for the first time in 2009-10 were \$74.4 million. This excludes the association between child abuse and criminal activity later in life. These costs are borne by the Victorian Government.

Table 6.7: Costs to the justice system of child abuse and neglect, 2009-10

Type of expenditure	Cost (\$'000)
Victim support (family violence)	219
Victim support (sexual abuse)	1,893
Children's Court (care and protection orders)	3,074
Coroner's court	60
Prosecution of perpetrators	4,268
Police	35,568
Incarceration of perpetrators	29,360
Total	74,443

Numbers have been rounded and may not add to the totals.

Second generation crime refers to criminal activity later in life by adults who were abused as children. (Various studies discussed in Taylor et al (2008) suggest that some children who have been abused take up criminal activity later in life.) The cost of second generation crime related to abuse which occurred for the first time in 2009-10 was between \$260,000 and \$1.6 million (Table 6.8).

Table 6.8: Second generation crime, (\$'000 2009-10)

Lower bound	Best estimate
260	1,585

6.5 Child protection and care, housing and SAAP

The estimated cost to the Victorian Government of child protection and OOHC incurred because of child and neglect which occurred for the first time in 2009-10 is just over \$1 billion (Table 6.9). The costs reflect a weighted average time in OOHC of 3.5 years (AIHW, 2011a).

Raman et al (2005) found that children leaving out of home care are substantially more likely to use public housing than average. Assuming these children remain in public housing for seven years, the cost to the Victorian Government is \$25.3 million (Table 6.9).

Supported Accommodation and Assistance Program funding where the main reason for seeking assistance was domestic violence, sexual abuse and physical/emotional abuse, and where there were support periods provided to children aged 0-17 years, cost around \$12 million¹³ in 2009-10 (Table 6.9). The Victorian Government contribution (based on SAAP V Multilateral Agreement (2005) funding splits for 2009-10) was 44.8% — \$5.4 million.

Table 6.9: Incidence costs of child protection and care, public housing and SAAP

Type of cost	\$'000 2009-10
Child protection, intensive family support and OOHC	1,032,141
Public housing for children leaving out of home care in 2009-10	25,300
SAAP funding attributed to child abuse and neglect	11,978

¹³ This has been factored down to remove the proportion of abuse and neglect with a duration of more than one year.

6.6 Deadweight losses

Efficiency losses associated with taxes and transfer payments arising because of abuse or neglect which occurred for the first time in 2009-10 are shown in Table 6.10. The lower bound totalled \$351.2 million and the best estimate was around \$411.4 million. Note that welfare estimates are attributed to children leaving OOHC in 2009-10 and, as these numbers are fixed, the welfare estimates remain the same for lower bound and the best estimate.

Table 6.10: Deadweight/efficiency losses, (\$'000 2009-10)

	lower bound	Best estimate
Health expenditure	8,562	53,952
Education	1,832	11,124
Productivity losses	4,356	9,440
Protection and support	296,741	296,741
Public housing & SAAP	10,717	10,717
Crime	21,477	21,858
Welfare	7,560	7,560
Total	351,245	411,392

6.7 Burden of disease

The lower bound for DALYs (for an explanation of DALYs — see section 3.5.9 or Taylor et al, 2008) is 1,315 and the best estimate is 7,640.

Table 6.11: DALYs by age — incidence

	Lower bound	Best estimate
0-4	130	160
5-14	70	80
15-24	330	1,780
25-34	230	1,630
35-44	260	1,870
45-54	200	1,400
55-64	70	520
65-74	20	110
75-84	10	60
85+	10	30
Total	1,315	7,640

Numbers have been rounded and may not add to the totals.

6.7.2 Monetary value of the burden of disease

As a point of comparison with the financial costs — noting that these monetary values cannot be added to financial costs — the lower bound value of the burden of disease is \$210 million and the best estimate is \$1.2 billion.

7 Summary

7.1 Prevalence costs

In total, the financial costs in 2009-10 of child abuse and neglect in Victoria were between \$876.6 million and \$1.0 billion (Table 7.1). In addition, abuse was also associated with loss of wellbeing and premature mortality estimated at between 1,384 and 6,866 disability adjusted life years, and valued at between \$221 million and \$1.1 billion.

The largest component of the financial costs was Victorian Government expenditure on child protection, OOHHC, intensive family support services and the Office of the Child Safety Commissioner (Chart 7.1).

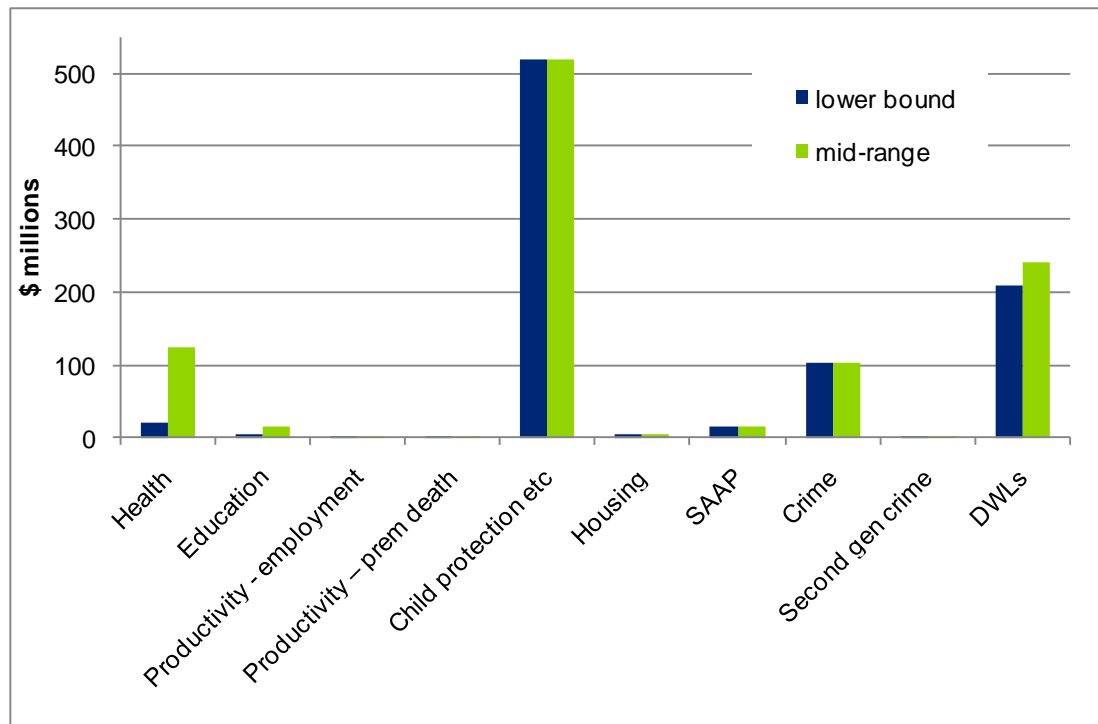
There is no difference between the lower bound and best estimate for many of the costs. This reflects the methodology used — not all of the estimated costs vary with prevalence.

- In accordance with the methodology, estimates of productivity losses associated with premature death remain the same for the lower bound and best estimate because the number of deaths is fixed as a proportion of the Victorian population by age and gender.
- Spending on the child protection system and intensive family support services is fixed at the amount spent by government in 2009-10.
- Public housing costs are based on the number of children leaving OOHHC in 2009-10 (which was assumed not to vary with different estimates of prevalence).
- The costs of the SAAP and crime, courts and victim support are estimated as the proportion of expenditure accounted for by the relevant services (including justice system services) supplied.

Table 7.1: Summary of prevalence costs, Victoria, 2009-10

	<i>Units</i>	Lower bound	Best estimate
Prevalence	<i>Number of children</i>	7,340	44,740
Financial costs			
Health system	<i>(\$'000)</i>	20,367	124,164
Education	<i>(\$'000)</i>	3,516	14,864
Productivity Losses – lower employment	<i>(\$'000)</i>	989	1,753
Productivity losses – premature death	<i>(\$'000)</i>	1,820	1,820
Child protection, OOHC, intensive family support and Child Safety Commissioner	<i>(\$'000)</i>	518,128	518,128
Public housing	<i>(\$'000)</i>	3,942	3,942
SAAP	<i>(\$'000)</i>	16,297	16,297
Crime, courts and victim support	<i>(\$'000)</i>	103,498	103,498
Second generation crime	<i>(\$'000)</i>	354	2,157
Deadweight losses	<i>(\$'000)</i>	207,682	241,374
Total financial costs	<i>(\$'000)</i>	876,593	1,027,997
Burden of disease			
DALYs	<i>DALYs</i>	1,380	6,870
Value of DALYs	<i>(\$'000)</i>	221,242	1,097,620

Chart 7.1: Prevalence costs 2009-10 — summary



7.2 Incidence costs

In total, the financial costs of child abuse and neglect which occurred for the first time in Victoria in 2009-10 were between \$1.6 billion and \$1.9 billion (Table 7.2). In addition, abuse was also associated with loss of wellbeing and premature mortality of between 1,315 and 7,640 DALYs. The loss of wellbeing has been valued at between \$210 million and \$1.2 billion.

Victorian Government expenditure on child protection, OOHHC, intensive family services and the Office of the Child Safety Commissioner accounted for the majority of the incidence costs (Chart 7.2).

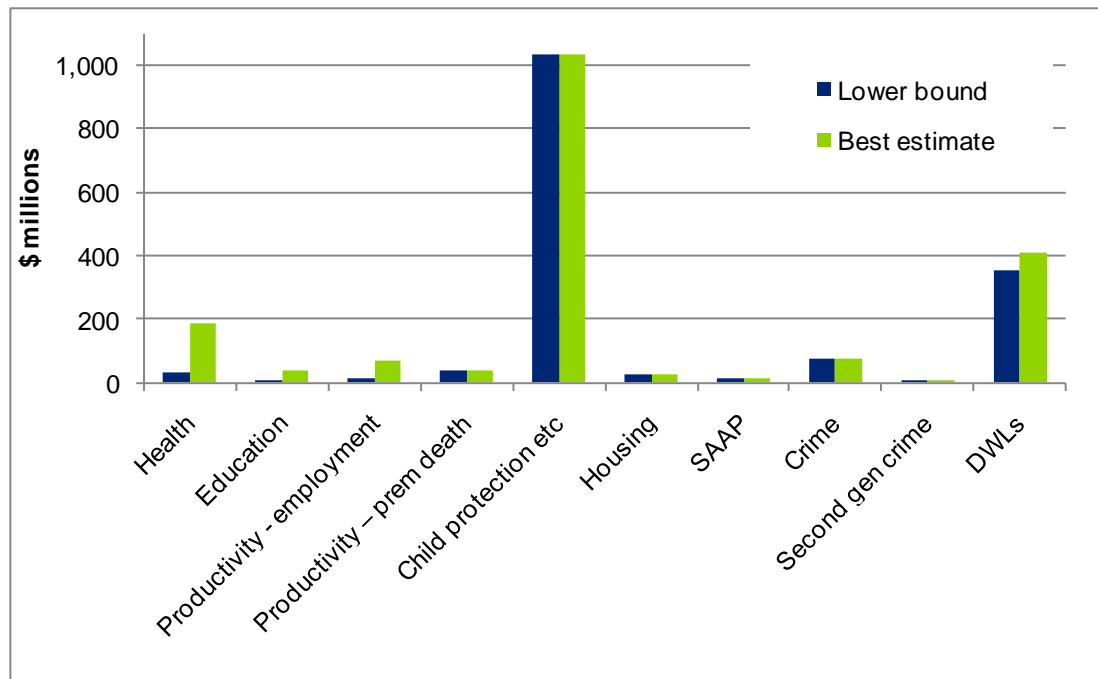
Consistent with the prevalence costs, there is no difference between the lower bound and best estimate for many of the incidence costs. The same types of costs are fixed as for prevalence. For examples, the cost of Child protection, OOHHC, intensive family support and Child Safety Commissioner was over \$1 billion for both the lower bound and best estimate. *This methodological approach has a somewhat counterintuitive impact on estimates derived for the average lifetime cost of abuse per child in 2009-10. The best estimate of the lifetime cost is lower than the lower bound estimate of lifetime costs because some of the costs of child abuse are fixed and do not vary with the number of children affected.* The estimated average lifetime **financial** cost of abuse per child based on the lower bound prevalence is of the order of \$300,000 and for the best estimate of prevalence the lifetime **financial** cost is up to \$60,000. The estimate of \$300,000 per affected child is preferred because there is great consistency between the estimate of government spending on child protection and the estimate of incidence which is based on substantiations. **Notably —**

both of these estimates of the lifetime costs of child abuse exclude loss of wellbeing (DALYs).

Table 7.2: Summary of incidence abuse and costs, Victoria, 2009-10

	<i>Units</i>	Lower bound	Best estimate
Incidence	<i>Number of children</i>	5,390	32,850
Financial costs			
Health system	<i>(\$'000)</i>	29,781	187,660
Education	<i>(\$'000)</i>	6,372	38,693
Productivity Losses – lower employment	<i>(\$'000)</i>	11,015	67,150
Productivity losses – premature death	<i>(\$'000)</i>	37,084	37,084
Child protection, OOHC, intensive family support and Child Safety Commissioner	<i>(\$'000)</i>	1,032,141	1,032,141
Public housing	<i>(\$'000)</i>	25,300	25,300
SAAP	<i>(\$'000)</i>	11,978	11,978
Crime, courts and victim support	<i>(\$'000)</i>	74,443	74,443
Second generation crime	<i>(\$'000)</i>	260	1,585
Deadweight losses	<i>(\$'000)</i>	351,245	411,392
Total financial costs	<i>(\$'000)</i>	1,579,619	1,887,428
Lifetime financial costs	<i>(\$'000)</i>	293	57
Burden of disease			
DALYs	<i>DALYs</i>	1,315	7,640
Value of DALYs	<i>(\$'000)</i>	210,064	1,221,055

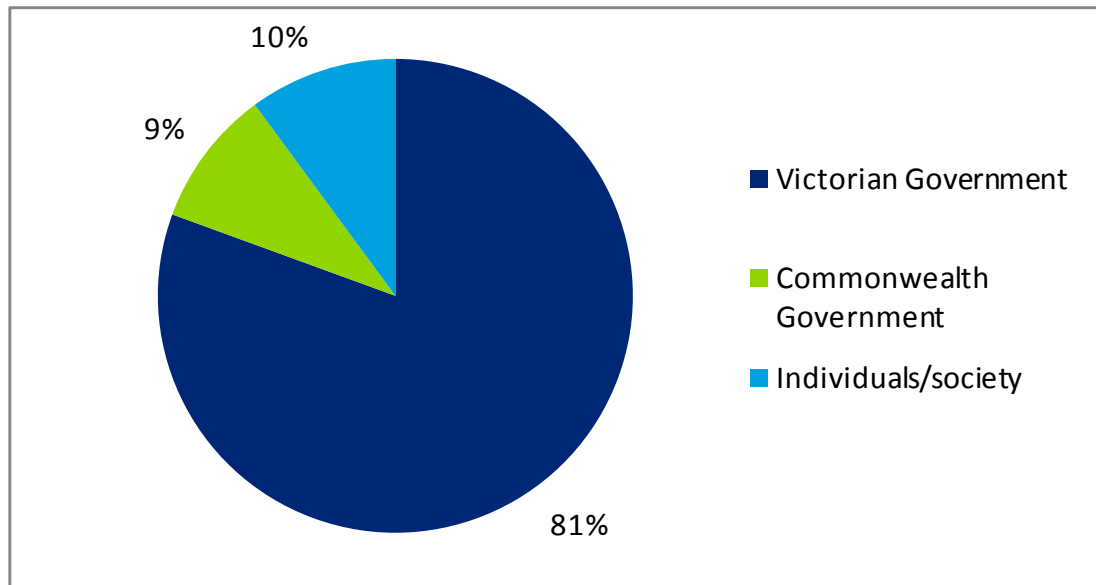
Chart 7.2: Incidence costs 2009-10 — summary



7.3 How the financial costs are distributed

The majority of the financial costs of child abuse and neglect are incurred by the Victorian Government (Chart 7.3). These shares are approximate because Commonwealth contributions (via Special Purpose Payments) are treated as State expenditure. It is important to reiterate that the non-financial costs (the loss of wellbeing experienced by Victorian children who have been abused or neglected) are not included in Chart 7.3. These non-financial costs are incurred by the children themselves. So the share of the total costs of abuse experienced by individuals is much higher than 10%.

Chart 7.3: Distribution of financial costs



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Appendix A: Population data

Table A.1: Victorian population, 1 June 2009

Age	Males	Females
0	36,489	34,688
1	36,356	34,316
2	36,161	34,238
3	34,475	33,080
4	33,537	31,846
5	33,579	31,879
6	33,161	31,498
7	33,040	31,510
8	33,590	31,637
9	33,635	32,357
10	34,015	32,297
11	34,223	31,757
12	34,529	32,653
13	34,725	32,857
14	35,536	33,788
15	35,731	33,851
16	35,856	34,352
17	36,823	34,638
Total aged 0-17	625,461	593,242

Source: ABS (2010) Australian Demographic Statistics, cat no. 3101.0, Table 52, Estimated Resident Population by single year of age, Victoria

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