

Part VIII: Risk and protective factors

Chapter 19: Family environment

Chapter 20: Biological and behavioural factors

The causes of poor health are many and complex. People can experience poor health because of factors beyond their control, such as genetic factors (including inheriting genes that predispose them to certain illnesses and genetic abnormalities that occur during conception) or the random incidence of certain diseases and injury. However, lifestyle and behaviour, attitudes, beliefs and knowledge, socioeconomic factors, family patterns, and the social and physical environment also affect health. These types of factors are known as risk and protective factors.

Risk factors are defined as those factors which make it more likely that a person will develop a problem or disorder (Sanders et al. 2000). Protective factors, on the other hand, reduce the likelihood of a person suffering a disease, or enhance their response to the disease should it occur. Both risk and protective factors exist within individuals, families and communities. From a public health perspective, the reduction of risk factors and the enhancement of protective factors have the potential to significantly reduce the occurrence of disease and injury (Dadds et al. 2000).

The importance of risk and protective factors to individual health and wellbeing has been increasingly recognised in recent years. Optimal growth and development in the prenatal life and early childhood have been shown to be critical to good health over an individual's lifetime. For example, nutritional deficiencies in-utero which reduce foetal growth can impair the development of endocrine and other tissues in the long term (McCance et al. 1994). Similarly, low birthweight can lead to adverse health outcomes during childhood and later in life (Barker et al. 1990). Some factors which affect the health of infants and children have their origin in the womb. For example, maternal smoking and excessive alcohol consumption during pregnancy can have a number of detrimental effects on the foetus, including low birthweight, spontaneous abortion and stillbirth.

The development of good health across a person's life begins in childhood, during which either good or poor health behaviours are learned. Instilling positive health behaviours in childhood can mitigate a number of risk factors and may be more successful than attempting to change behaviour later in life. For example, over-consumption of food and lack of physical activity can lead to overweight and obesity in children, which have been linked to poor health both in childhood and later in life. Adverse health is to some degree preventable, if early interventions take place. For example, an adequate intake of folate, a B-group vitamin, by the mother before and in early pregnancy can prevent up to 70% of neural tube birth defects (spina bifida and related defects). Changes in the sleeping position of infants have resulted in a dramatic decline in deaths from SIDS. An unnecessarily large number of children are seriously injured in Australia. These injuries and conditions are, to some degree, preventable, through public awareness and modification of unsafe environments.

A number of issues are particularly pertinent to child health. Children are less in control of their own behaviour than adults, and have less control over their physical and social environments, their lifestyles and their attitudes and knowledge. Their health is largely determined by the living conditions, knowledge and attitudes and lifestyles of the adults who care for them.

The health of children is strongly associated with the socioeconomic conditions of the family and the mental status of parents and carers. The ethnicity of a child's parents is also a significant determinant of child health in Australia. Aboriginal and Torres Strait Islander children in all age groups are at higher risk of disease or injury and have higher mortality than other Australian children. Poor socioeconomic circumstances and living

conditions and higher rates of pre-term and low birthweight babies all contribute to the higher death rates.

The sex of the child is also an important determinant of health. In many areas, boys suffer poorer health outcomes, greater morbidity and consistently higher injury from accidents, than girls. While some of the difference is biologically determined, a major component is the outcome of accepted social differences in behaviour between boys and girls.

Although in this report the focus is on the relationship between individual risk and protective factors and health outcomes, there is a legitimate argument that a more successful approach to improve children's health and wellbeing would include structural factors such as economic, political, social and environmental conditions. Stanley (2001) has argued that when individual factors are the only focus, the main underlying societal factors influencing health issues remain unaddressed.

Risk and protective factors covered in this part include those associated with individuals and their families. Family factors include family type, family socioeconomic status, family functioning and carer's self-assessed health. Children who are found to be in need of protection by State/Territory community services departments are also examined as a population that has multiple family risk factors. Biological and behavioural factors examined include birthweight, nutrition, physical activity, overweight and obesity, drug use, use of sun protection and immunisation.

19. Family environment

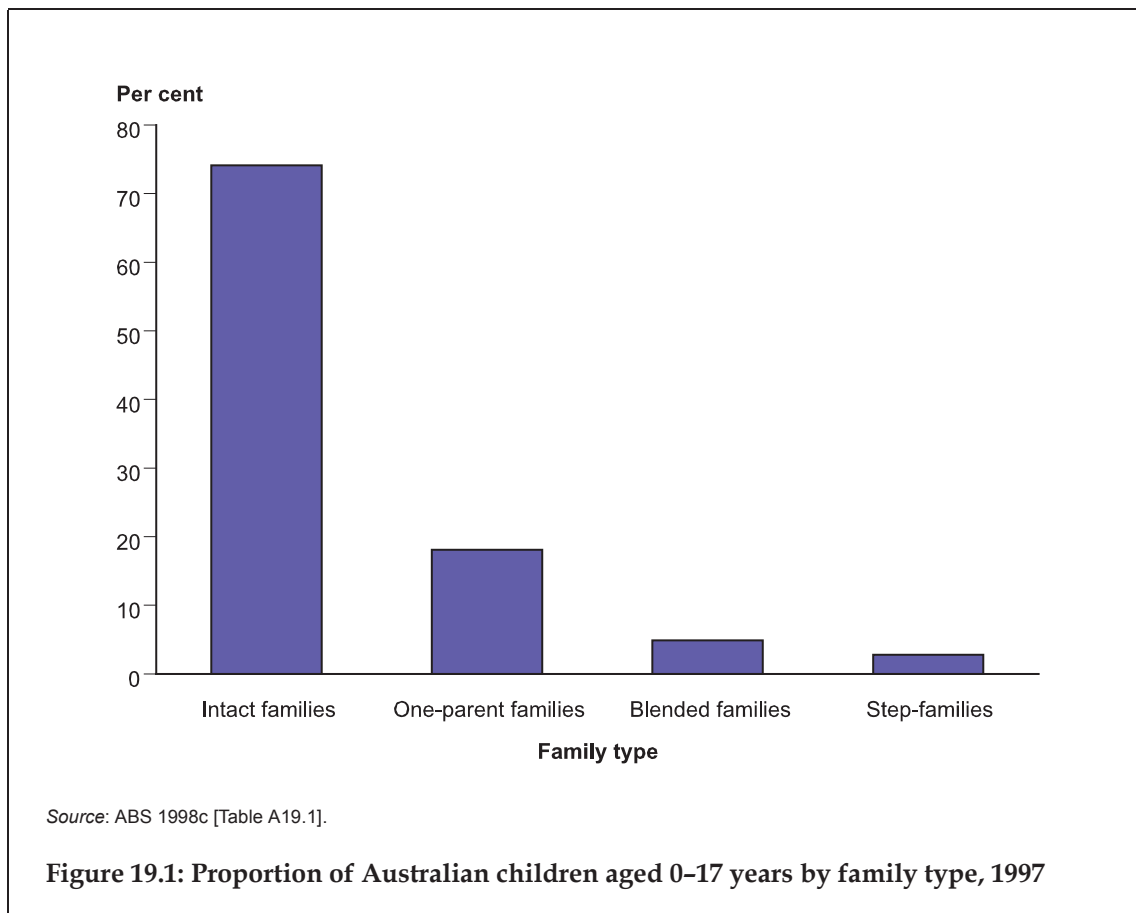
The family environment of children can have an important effect on their health and wellbeing, both in childhood and in the longer term (Centre for Community Child Health 2000). This section examines some of the social and economic characteristics of families that have been identified as risk and protective factors for child health and wellbeing. Some of these risk factors, such as low socioeconomic status and poor family functioning, often occur together and may have a cumulative effect on child health outcomes.

Family type

In Australia, families with children are generally categorised into four family types – intact families, one-parent families, step-families and blended families. The ABS (1999b:128–32) defines these family types as follows:

- An intact family is a ‘couple family containing at least one child who is the natural child of both members of the couple, and no child who is the stepchild of either member of the couple’.
- A one-parent family is ‘a family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is usually resident in the household’.
- A step-family is ‘a couple family containing one or more children, at least one of whom is the stepchild of either member of the couple and none of whom is the natural or foster child of both members of the couple’.
- A blended family is ‘a couple family containing two or more children, of whom at least one is the natural child of both members of the couple, and at least one is the stepchild of either member of the couple’.

The proportions of Australian children aged 0–17 years in these family types are shown in Figure 19.1.



- In 1997, the majority of Australian children (74%) aged 0-17 years lived in intact families, that is, with both natural parents (ABS 1998c). A substantial minority of children (18%) lived in one-parent families: 16% with their mother only and 2% with their father only. A small proportion of children (8%) lived in step- or blended families: 3% in step-families and 5% in blended families.

Living in a one-parent, step- or blended family is a risk factor for poorer health and wellbeing, because of factors that tend to be associated with these types of families. For instance, for one-parent families, these factors include low socioeconomic status and parental stress due to lack of adult support within the household. For families where parents have experienced marital breakdown, whether one-parent, step- or blended families, they may include factors such as the effects of divorce on children and conflict between separated or divorced parents.

Boys in one-parent families have been found to be more likely to have poor health, injuries and chronic illness than boys in intact families, and children in one-parent families are more likely to have a disability or impairment (AIHW: Mathers 1995). However, the stress caused by having a child with a chronic illness, disability or impairment can also lead to marital breakdown and the formation of one-parent families.

In the 1998 Child and Adolescent Component of the National Survey of Mental Health and Wellbeing, Sawyer et al. (2000) found that higher proportions of children in one-parent families and in step- or blended families had mental disorders than children in intact families. Similarly, Silburn et al. (1996), using data from the 1993 Western

Australian Child Health Survey, found that family type was one of the significant risk factors for a child's poor mental health status: children in one-parent and step- or blended families were found to have a higher risk of mental health problems than children in intact families when other significant risk factors were controlled. It is possible that, in these circumstances, 'family type' may be a proxy for factors such as the long-term effects of divorce on children or conflicting relationships between non-resident parents (see below), factors that were not examined in the survey.

Family socioeconomic status

Many studies have found a strong association between family socioeconomic status and child health and wellbeing (Jolly 1990). Family income, parental employment status and/or education – all of which are strongly associated with one another – are generally used as indicators of socioeconomic status.

Most research overseas and in Australia has found that low family income is highly correlated with poor child health and wellbeing. Children living in poor families, for instance, have higher injury rates, are likely to be hospitalised more frequently, have a higher prevalence of obesity and have worse dental health than other children (AIHW: Mathers 1995). They are also more likely to have behavioural disorders and psychiatric problems.

The relationship between family income and the health status of children, based on data from the 1995 ABS National Health Survey, was examined in detail in *Australia's Children: their health and wellbeing 1998* (AIHW: Moon et al. 1998). The health status measures examined in that report included the frequency of long-term and recent conditions, the frequency of specific conditions, breastfeeding and health services use.

Children from low-income families were reported to have the highest number and frequency of long-term conditions (lasting for 6 months or more), while children from high-income families had the highest number and frequency of recent conditions (in the last 2 weeks; AIHW: Moon et al. 1998). The prevalence of specific conditions by income group was variable. The conditions with the higher reported prevalence in the lower income groups included deafness, bronchitis and migraine. Otitis media and epilepsy had a higher reported prevalence in the middle income groups, while dental problems, eczema, hay fever and injuries had a higher reported prevalence in the highest income groups.

Breastfeeding in general and exclusive breastfeeding for at least 3–6 months has many beneficial health effects for children. A clear relationship was observed between the proportion of children never breastfed and income groups. Nearly 20% of children in the lower income groups were not breastfed, compared with just under 10% in the higher income groups. Also, around half of children under 4 years in the lowest income groups, compared with under 40% in the highest income group, were not exclusively breastfed for the first 3 months of life.

Health services use reflects both health status and access to services. The relationship between use and family income was examined in regard to hospitalisations, visits to emergency departments, visits to doctors and visit to dentist (AIHW: Moon et al. 1998). The most obvious relationship between income and health services use was in visits to dentist: nearly 5% of children in the lowest income group reported having visited a dentist in the 2 weeks prior to the survey, compared with 8% in the highest income groups.

As noted, family employment status is another indicator of socioeconomic status. Families with no parent employed generally have low incomes and live in poor economic circumstances – they are also more likely to be socially isolated than families with an employed parent. Living in a jobless family may have long-term effects on children's development, their educational progress and their own employment prospects. Long-term unemployment often leads to stress, tension and family conflict, which may impact on children's emotional and mental health (McClelland 1994).

Children living in low socioeconomic status families are more likely to have poor health for several reasons (AIHW 1992; Jolly 1990). Families with low incomes are unable to buy the goods and services that are necessary for good health – such as food that provides adequate nutrition and good quality housing. They are also more likely to live in poor physical and socioeconomically deprived environments. Families with low socioeconomic status are less likely to use preventive and early intervention health services and more likely to delay seeking help when they are sick. The cost of health services can also be a deterrent to the use of services. Children in poor families who obtain most of their primary health care from accident or emergency departments at public hospitals also suffer from a lack of continuity of care.

One-parent families are more likely to be disadvantaged than couple families in terms of their socioeconomic status. Sole parents are more likely to have low incomes and less likely to be employed and therefore to suffer from financial stress (Harding & Szukalska 2000).

Aboriginal and Torres Strait Islander children experience a number of disadvantages in their socioeconomic status compared with other Australian children. Indigenous families are more likely to have low incomes, less likely to have a parent employed and/or to have post-school educational qualifications, and more likely to be renting their home, and be living in overcrowded conditions and in improvised dwellings such as sheds and humpies (AIHW 2000a). Their disadvantaged socioeconomic status and living conditions are among the factors that put Indigenous people at 'greater risk of ill health and reduced wellbeing' (ABS & AIHW 1999:24).

Family income

Income distribution is generally analysed using the concept of 'income units', which are broadly defined as individuals or related groups of people living in the same household that share income (ABS 1999b:43). The total number of income units in the population (comprising family income units, couples without children, and single people) can be divided into five equal groups, according to income, in order to compare their relative economic wellbeing. Each group, or 'quintile', contains 20% of the income units in the population. Family income units are not necessarily evenly distributed across the income quintiles.

The distribution of families with dependent children aged 0–17 years (and children living in those families) across the income quintiles for the total population, according to gross income, is shown in Table 19.1. Gross income is family income from sources such as earnings, government income support and family payments.

Table 19.1: Gross income quintiles for families with dependent children aged 0–17 years, 1999–00 (per cent)

Family type	Income quintile (all income units)/Gross income per week (\$)					Total	Total ('000)
	Lowest/ <231	Second/ 231–421	Third/ 422–673	Fourth/ 674–1,103	Highest/ >1,103		
Families							
Couple families with dependants	3.9	6.6	15.7	31.2	42.6	100.0	1,991.9
One parent with dependants	6.6	44.3	28.5	16.8	3.8	100.0	490.7
<i>Total</i>	4.4	14.1	18.2	28.4	34.9	100.0	2,482.6
Children aged 0–17 years							
In couple income units	3.9	6.2	15.8	32.4	41.6	100.0	3,859.3
In one-parent income units	5.8	43.0	30.8	16.7	3.8	100.0	828.9
<i>Total</i>	4.2	12.7	18.5	29.7	34.9	100.0	4,688.3

Source: ABS unpublished data 1999–00 Survey of Income and Housing Costs.

- In 1999–00, only 4.2% of children aged 0–17 years (or 197,300 children) lived in families with gross incomes in the lowest quintile (less than \$231 per week). Another 12.7% (or 596,100 children) lived in families with gross incomes in the second lowest quintile (between \$231 and \$421 per week). To put these income levels into perspective, in 1999–00, families with taxable incomes of less than \$28,200 per year (or \$540 per week) were eligible for the Commonwealth Government's low-income family payments.¹
- Children in one-parent families were more likely to live in families with low gross incomes. For instance, almost half (48.8%) of the children in one-parent families lived in families with gross incomes in the bottom two quintiles (less than \$422 per week) compared with 10.1% of children in couple families.

When examining the gross income distribution, it appears that couples with children are relatively 'wealthy' compared with other income units, since, in 1999–00, almost two-thirds of couples with children (73.8%) had incomes in the top two quintiles (\$674 or more per week). Comparing income units on the basis of gross income, however, does not take into account differences in income unit size and composition. A couple with two children, for instance, may have the same gross income as a single person, but because a family has greater needs, they cannot achieve the same standard of living as a single person. Differences in the needs of different income units can be taken into account, however, by using equivalence scales to adjust the net income (gross income less taxes) of income units for differences in size and composition. The distribution of equivalent income presents a very different picture of relative economic wellbeing.

One indicator for socioeconomic status is the number of dependent children aged 0–17 years living in families with equivalent incomes in the lowest equivalent income quintile as a percentage of all dependent children aged 0–17 years living in families (Table 19.2).

1. Taxable income includes income from wages and salaries and government income support, but excludes family payments. Thus, taxable income is generally somewhat lower than gross income.

Table 19.2: Equivalent (OECD) income quintiles for families with dependent children aged 0–17 years, 1999–00 (per cent)

Family type	Income quintile (all income units)/Gross income per week (\$)					Total	Total ('000)
	Lowest/ <231	Second/ 231–421	Third/ 422–673	Fourth/ 674–1,103	Highest/ >1,103		
Families							
Couple families with dependants	17.8	19.7	29.1	21.9	11.5	100.0	1,991.9
One parent with dependants	37.2	22.5	26.7	10.3	3.2	100.0	490.7
<i>Total</i>	21.6	20.3	28.6	19.6	9.9	100.0	2,482.6
Children aged 0–17 years							
In couple income units	21.2	21.7	28.6	19.6	8.9	100.0	3,859.3
In one-parent income units	43.5	23.2	23.7	7.5	2.1	100.0	828.9
<i>Total</i>	25.2	22.0	27.7	17.5	7.7	100.0	4,688.3

Source: ABS unpublished data 1999–00 Survey of Income and Housing Costs.

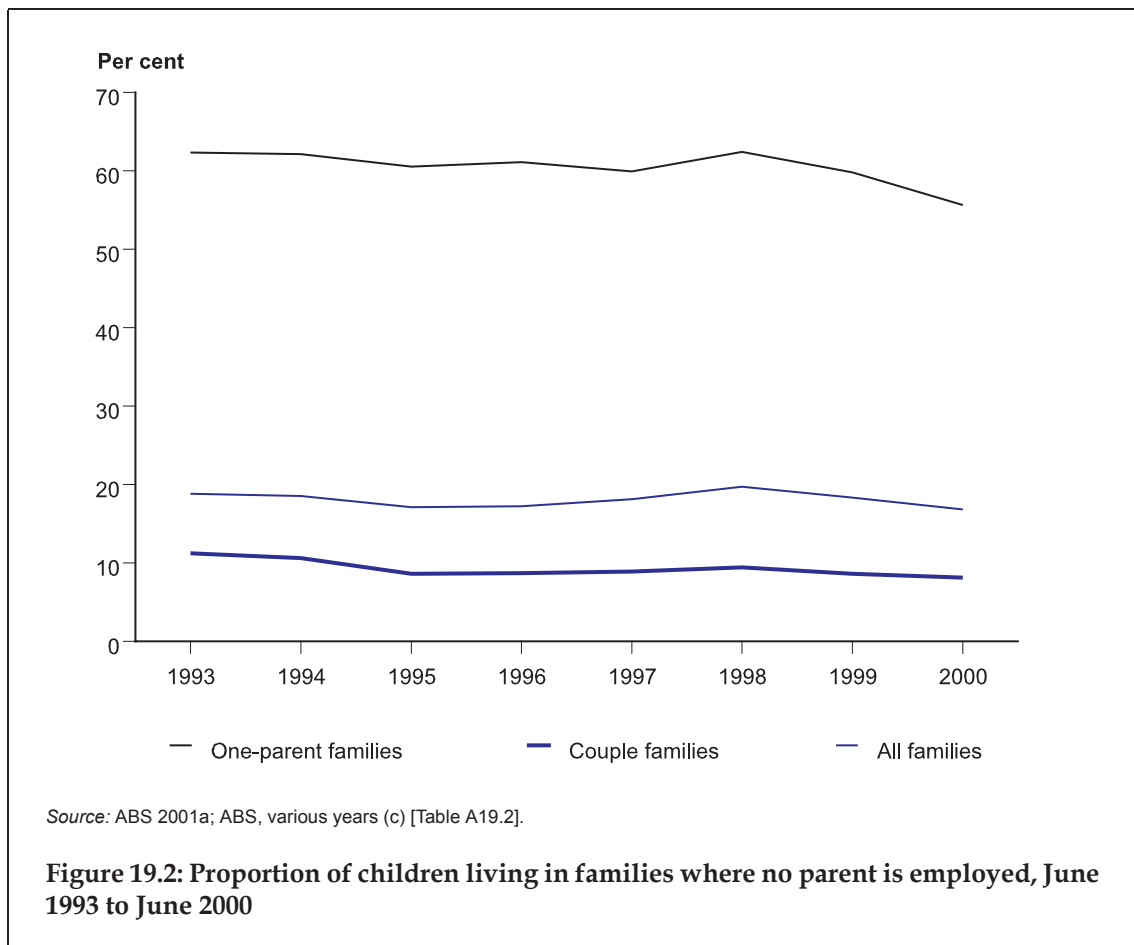
- Using the OECD equivalence scale (ABS 1999b), in 1999–00, 25.2% of children (or 1,179,200 children) lived in families with incomes in the lowest quintile. The proportion of children in one-parent families with incomes in the lowest quintile was twice that of children in couple families, 43.5% compared with 21.2%.

Many researchers have argued that while low income is a good indicator of poverty and disadvantage, it should not be used as the only indicator (Brownlee 1990). They consider that poverty and disadvantage should be measured using both indicators of resources, such as income and indicators of 'living conditions'. One indicator used in research studies on family poverty is the proportion of households with dependent children who went without food because of a shortage of money (Gordon & Pantazis 1997).

The indicator for food security used here is the number of households with dependent children aged 0–14 years that reported ever running out of food and having no money to buy more, as a percentage of all households with dependent children aged 0–14 years. From the 1995 ABS National Nutrition Survey, an estimated 8% of households with dependent children under 15 years ran out of food and had no money to buy more, at least once, in the previous 12 months (ABS unpublished data).

Families without a parent employed

Another indicator of socioeconomic status is the number of children aged 0–14 years living in families where no parent was employed, as a percentage of all children aged 0–14 years living in families (Figure 19.2).



- The proportion of all children under 15 years living in families without a parent employed fell from 19% in June 1993 to 17% in June 2000, or from around 712,000 children to around 677,000 children, albeit with some fluctuation over this period.
- Over the period, the proportion of children with no parent employed was considerably higher for those in one-parent families than in couple families. This is hardly surprising, given that single parents have no co-resident parent available to care for their children while they work. In 2000, among children who lived in couple families, 8% lived in families where neither parent was employed. Of children who lived in one-parent families, 56% lived in families where the parent was not employed.
- Reflecting the growth in the 1990s in the total number of single parents who were not employed (AIHW 2001d), the number of children living in one-parent families where the parent was not employed increased from around 361,000 in 1993 to around 411,000 in 2000. Conversely, the number of children living in couple families where neither parent was employed fell from 351,000 to 266,000 over the same period.

Family functioning

Another important aspect of the family environment to consider when examining risk factors for child health and wellbeing is family functioning. It must be noted, however, that no general agreement exists as to what constitutes 'family functioning', although there is general consensus that proxy measures such as family type are inadequate

(Zubrick et al. 2000). Silburn et al. (1996:37) defined family functioning as 'achieving some degree of acceptance of each individual reaching consensus on decisions, communicating feelings and solving day to day problems'. In their analysis of the 1993 Western Australian Child Health Survey, these researchers measured family functioning using indicators such as marital relationship quality, family discord, life-stress events (for example, divorce) and parent's disciplinary style.

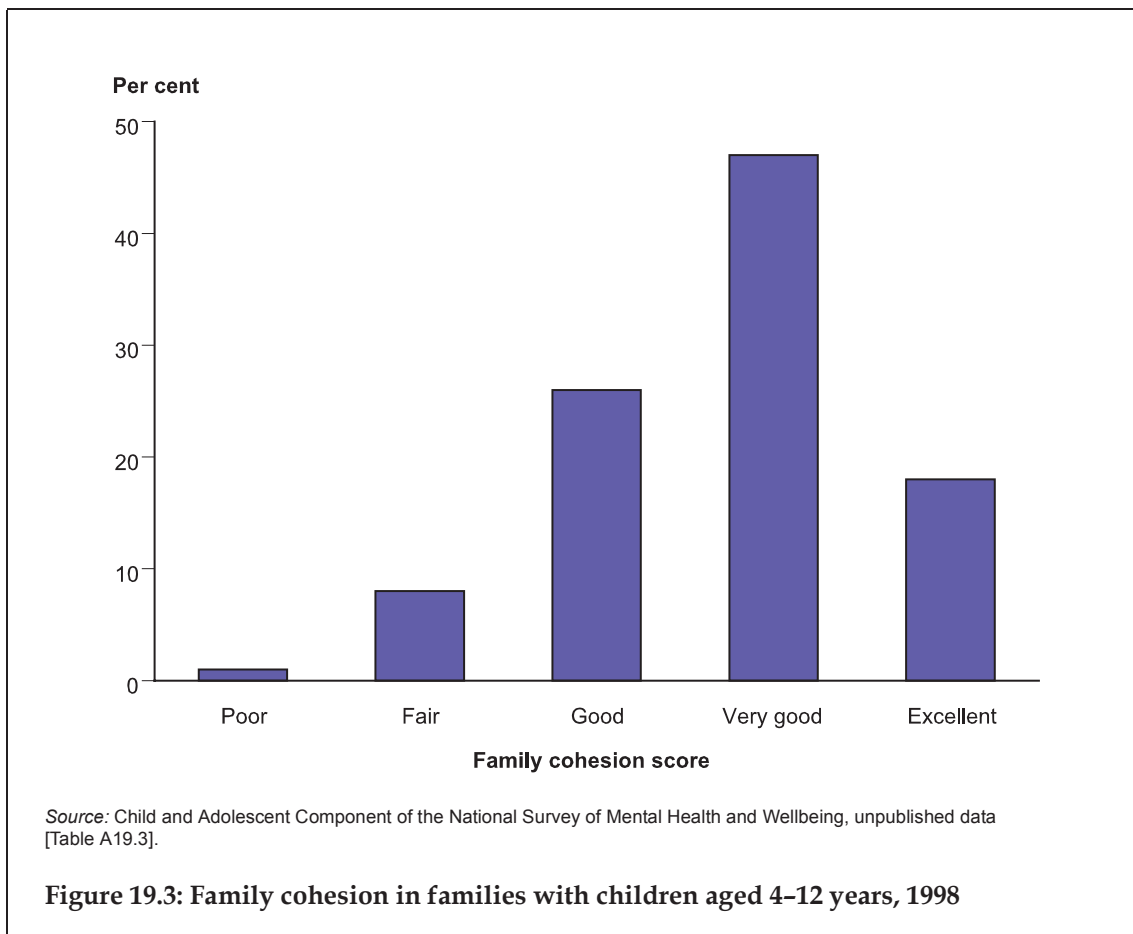
Silburn et al. (1996) found that two aspects of family functioning – family discord and parental disciplinary style – were significant risk factors for children's poor mental health. Research studies in other countries have also shown links between parental conflict and children's wellbeing and behaviour (Grych & Fincham 1990). Children who are exposed to parental conflict may become fearful and angry, and often suffer from stress. In modelling their behaviour on parents who resolve arguments with fighting, they may also become more aggressive. In Australia, a recent study on children with asthma found that how children feel about their illness is likely to be affected by their family functioning (Sawyer 2001). Children who lived in families where there was tension and conflict were more distressed and frightened by their asthma symptoms than other children with asthma.

In the following section, three aspects of family functioning are examined – family cohesion, divorce and parenting styles.

Family cohesion

The 1998 Child and Adolescent Component of the National Survey of Mental Health and Wellbeing examined the relationship between the level of family cohesion, and the mental health of children aged 4–17 years (Sawyer et al. 2000). The survey measured family cohesion by asking parents with a child aged 4–17 years about their family's ability to get on with one another. Families with difficulty getting on with one another were characterised as follows – 'They do not always agree and they may get angry'. Families' ability to get on was rated on a five-point scale, from 'poor' to 'excellent'.

The indicator of family cohesion is the number of children aged 4–12 years living in families where family cohesion is low as a percentage of all children aged 4–12 years living in families. Data for families with children aged 4–12 years is presented in Figure 19.3.



- In 1998, only 9% of parents with a child aged 4-12 years reported that their family's ability to 'get along' was 'poor' or 'fair' – less than 1% of parents reported that it was 'poor'.
- Almost two-thirds (65%) of parents rated their family's ability to get on as 'very good' (47%) or 'excellent' (18%).

While the survey found that children with more emotional and behavioural problems lived in 'less cohesive' families, the causal direction may be two-way. The poor degree of family cohesion may affect the child's mental health, but having children with poor mental health may also affect family cohesion.

Children experiencing divorce

Research in Australia, as overseas, has found that parental separation and divorce tend to have negative effects on children's emotional and mental health in the short term. However, in the long term, the health of most (but not all) children is not affected and they adjust to their changed family circumstances (Amato 1987, 1997). Studies suggest that, in the longer term, the level of family conflict has a more important effect on children's emotional and mental health than whether or not children had experienced the divorce of their parents (Dunlop & Burns 1989).

Data on children under the age of 18 affected by divorce are presented in Table 19.3. Data are not available on the number of children who experience the break-up of their

parents' de facto relationship. In 1997, 9% of couple families with children were living in de facto relationships (ABS 1998c).

The indicator for children experiencing divorce is the number of children under 18 years affected by divorce (that is, whose parents divorce) in a given year as a rate per 1,000 children.

Table 19.3: Children under 18 years affected by divorce, 1991–99

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number	46,700	45,700	48,100	47,500	n.a.	52,500	51,700	51,600	53,400
Rate per 1,000 children	10.2	10.0	10.5	10.1	n.a.	11.2	11.0	11.0	11.3

Note: Numbers have been rounded to the nearest 100.

Source: ABS 2001a.

- Between 1991 and 1999, the number of children under 18 affected by divorce rose from 46,700 to 53,400. The rate increased from 10.2 to 11.3 per 1,000 (ABS 2001a).

Parenting style

As noted, Silburn et al. (1996) found that parental disciplinary style was a significant risk factor for children's mental health and wellbeing. In the 1993 Western Australian Child Health Survey, caregivers were asked about the parenting behaviours they used to deal with children's misbehaviour and the methods they employed to encourage desirable behaviour. Parental disciplinary style was classified into four categories:

- encouraging – characterised by high use of rewards and reinforcements and low frequency of coercive methods;
- inconsistent – characterised by high frequency of coercive methods and high levels of reinforcement;
- neutral – characterised by low frequency of coercive discipline and low use of reinforcements; and
- coercive – characterised by high levels of coercive discipline and low use of reinforcement.

While almost half (49%) of parents used an 'encouraging' style, more than a third (38%) had a parenting style that was 'inconsistent'. Only a small proportion of parents had a 'neutral' or 'coercive' style (7% and 5%, respectively).

The survey found higher rates of mental health problems among children whose parents used coercive (29%) or inconsistent disciplinary styles (24%), compared with an average of 18% for all children.

Carer's self-assessed health

Children rely on their principal and other carers for their physical, emotional, and economic needs and support. When disruption to parenting or caregiving occurs, as sometimes happens with the onset of a physical or mental illness in the principal caregiver, the needs of the child may receive less attention, or in extreme cases may not be met at all.

The health and wellbeing of the principal carer is therefore an important risk factor for children's health and wellbeing, because it will often affect the capacity of a parent or other significant adult to provide adequate care for the child. Sometimes children with a sick parent or carer may take on the role of carer themselves, taking on extra

responsibility for the care of younger siblings, household chores or even care of the ill adult, which may impact negatively upon the child's personal wellbeing. In addition, the health of an immediate family member such as a parent can be a good predictor of child's future health, given the important role of genetics and hereditary factors, as well as factors such as the family's health behaviours.

The indicator of carer's self-assessed health is the number of principal caregivers of children aged 0–14 years who assessed their health status as 'excellent' or 'very good' as a percentage of all principal caregivers.

In the 1993 Western Australian Child Health Survey, parents were asked to evaluate their own general health, according to whether it was 'excellent', 'very good', 'good', 'fair' or 'poor'. Silburn et al. (1996) found that 66% of principal caregivers (mostly mothers) and 71% of secondary caregivers reported that their physical health was 'excellent' or 'very good'. Single parents were more likely to report that they had worse health than principal caregivers in couple families: 51% of single parents reported that their health was 'good', 'fair' or 'poor', compared with 30% of principal caregivers in couple families.

Silburn et al. (1996) found that children whose parents had general health problems, a chronic condition, a disability, or a history of mental health problems were more likely to have lower levels of general health and/or a mental health problem. Among children with one or both parents reporting a lower level of general health, 31% were reported as having a lower level of general health. Among children with one or both parents reporting a history with mental health problems, 29% had a lower level of general health, and 28% reported having a mental health problem.

Children in need of protection

Children who are in need of protection include those who have been abused, neglected or otherwise harmed, and/or whose parents cannot provide adequate care and protection for them. Child abuse and neglect is associated with multiple risk factors such as low socioeconomic status, family disruption, domestic violence and substance abuse (AIHW 2001e). Children in need of protection are of concern to health professionals because of the profound negative impact abuse and neglect can have on children's health and wellbeing. Child abuse and neglect is generally classified into one of the following four categories: physical abuse, sexual abuse, emotional abuse, and neglect.

The relationship between child abuse and neglect and child health and wellbeing is complex and is related to the type, severity and duration of the abuse or neglect and to the context in which it occurs. The more frequent, the more prolonged and the more serious the abuse or neglect, the more damaging it will be for the child (NSW Commission for Children and Young People 2001). The presence or absence of other risk factors also influences the effects on the child. For example, the effects of abuse or neglect have been found to be less harmful if the child receives emotional support from another important adult in his or her life (Shonkoff & Phillips 2000). The negative effects of child abuse and neglect are likely to be compounded when additional risk factors are present.

Abuse and neglect can have both short-term and long-term adverse consequences for children. Physical and sexual abuse can have an immediate damaging effect on children's health through the injuries that children incur. In addition, children who have been abused or neglected often have poor developmental outcomes, such as lower

social competence, poor school performance and impaired language ability. The longer term effects of abuse and neglect are primarily related to a child's mental health and include depression, anxiety disorders and suicidal and self-injurious behaviours (Shonkoff & Phillips 2000).

In extreme cases, child abuse and neglect can lead to serious harm or injury. One measure for such extreme cases is the rate of hospital separations due to assault. In 1999-00, the rate of hospitalisation of children aged 0-14 years for injuries inflicted by another person was 21.8 per 100,000.

There are no reliable measures of the prevalence of child abuse and neglect in Australia, mainly due to the difficulties in both defining and measuring abuse and neglect. Prevalence rates can vary considerably depending on the definitions used. In Australia, child protection is the responsibility of the State and Territory Governments. The AIHW collects national data on child protection notifications, investigations and substantiations, children on care and protection orders, and children in out-of-home care. It should be noted that these national data relate to situations that have come to the attention of child protection authorities in each jurisdiction, and therefore only include a proportion of all abuse and neglect cases that occur within the community.

The following section provides data on children who were the subject of a child protection substantiation and children on care and protection orders.

Children in substantiations

Child abuse or neglect or harm to a child is substantiated if, in the professional opinion of officers of the child protection authority, there is reasonable cause to believe that a child has been, is being or is likely to be abused or neglected or otherwise harmed (AIHW 2001e).

One indicator of children in need of protection is the number of children aged 0-14 years who were the subject of a child protection substantiation, as a rate per 1,000 children.

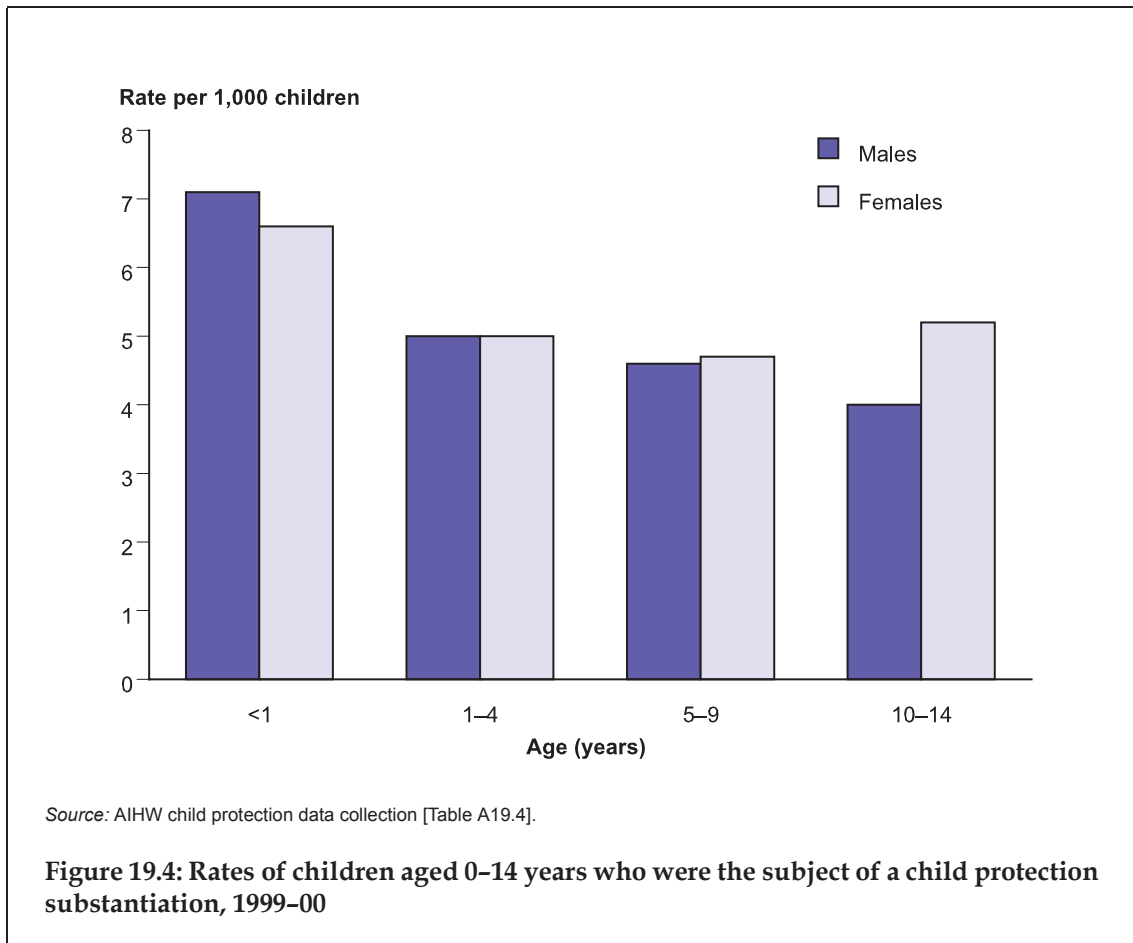
Table 19.4: Children aged 0-14 years who were the subject of a substantiation, 1990-91 to 1999-00

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00
Number	16,330	15,695	20,127	22,615	18,957	23,403	n.a.	19,884	19,659	19,150
Rate per 1,000 children	4.3	4.1	5.3	5.9	4.9	6.0	n.a.	5.1	5.0	4.9

Source: AIHW 2001e.

- In 1999-00, 19,150 children aged 0-14 years (4.9 per 1,000 children) were the subject of a child protection substantiation in Australia.
- The number and rate increased from 16,330 (4.3 per 1,000) in 1990-91 to 23,403 (6.0 per 1,000) in 1995-96 and then decreased to 19,150 (4.9 per 1,000) in 1999-00.
- Changes in the number and rate of children in substantiations in the second half of the 1990s are partly due to changes in child protection policies in a number of jurisdictions. Therefore, it is difficult to assess trends in the rate of children subject to substantiations over time.

Rates of children in substantiations varied by the age and sex of the child (Figure 19.4).



- Rates of children in substantiations in 1999-00 were highest for those under 1 year, with male infants having the highest rates of all children aged 0-14 years (7.1 per 1,000 male infants and 6.6 per 1,000 female infants). Because of their vulnerability, young children are at a greater risk of abuse and neglect and most jurisdictions have special procedures in place to protect them (Victoria DHS 1999). Rates of substantiations were lowest for children aged 5-9 years (4.6 for boys and 4.7 for girls).
- The difference in rates between boys and girls was greatest for children aged 10-14 years (4.0 and 5.2, respectively). The higher rates of girls aged 10-14 years is due to their overrepresentation in substantiations of sexual abuse. There were almost 3 times as many girls as boys who were the subject of a substantiation of sexual abuse (AIHW 2001e).

Children on care and protection orders

Most children and families who come into contact with the child protection authorities through the substantiation process or through other avenues are assisted by the provision of appropriate support services. Such services include parenting education, family mediation and counselling, and in-home family support. In situations where further intervention is required in order to protect a child, the child protection authority may apply to the relevant court to have the child admitted to a care and protection order.

Recourse to the court is generally a last resort and is used in situations where supervision and counselling are resisted by the family, where other avenues for resolution of the situation have been exhausted, or where removal of a child into out-of-home care requires legal authorisation. Children on orders are those children for whom there are more serious concerns about their safety and wellbeing.

A care and protection order provides the community services department with greater authority and responsibility for the child. These orders include guardianship and custody orders as well supervision orders. The data on children on care and protection orders show the total number of children on these orders at 30 June of each year and are therefore a measure of the prevalence of children on orders at a point in time.

Another indicator of children in need of protection is the number of children aged 0–14 years on care and protection orders as a rate per 1,000 children.

Table 19.5: Children aged 0–14 years on care and protection orders at 30 June, 1991–00

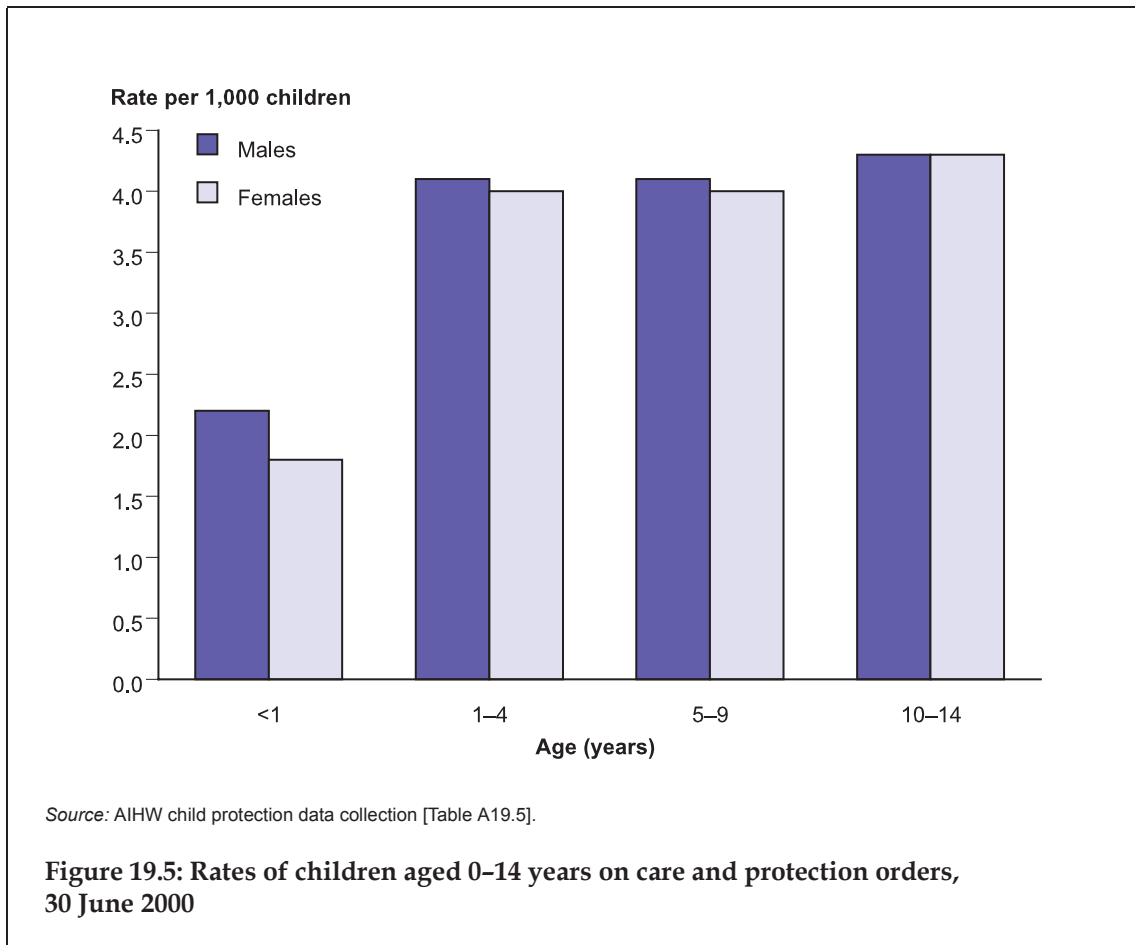
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Number	9,545	9,261	9,167	9,744	10,419	10,537	12,703	13,280	14,475	15,704
Rate per 1,000 children	2.5	2.4	2.4	2.5	2.7	2.7	3.2	3.4	3.7	4.0

Note: The scope of the data collection for children on care and protection orders was changed in 1997, so the data from 1997 onwards should not be compared with previous years.

Source: AIHW 2001e.

- The number of children aged 0–14 years on care and protection orders at 30 June increased from 9,545 (2.5 per 1,000) to 10,537 (2.7) between 1991 and 1996, and then from 12,703 (3.2) to 15,704 (4.0) between 1997 and 2000.

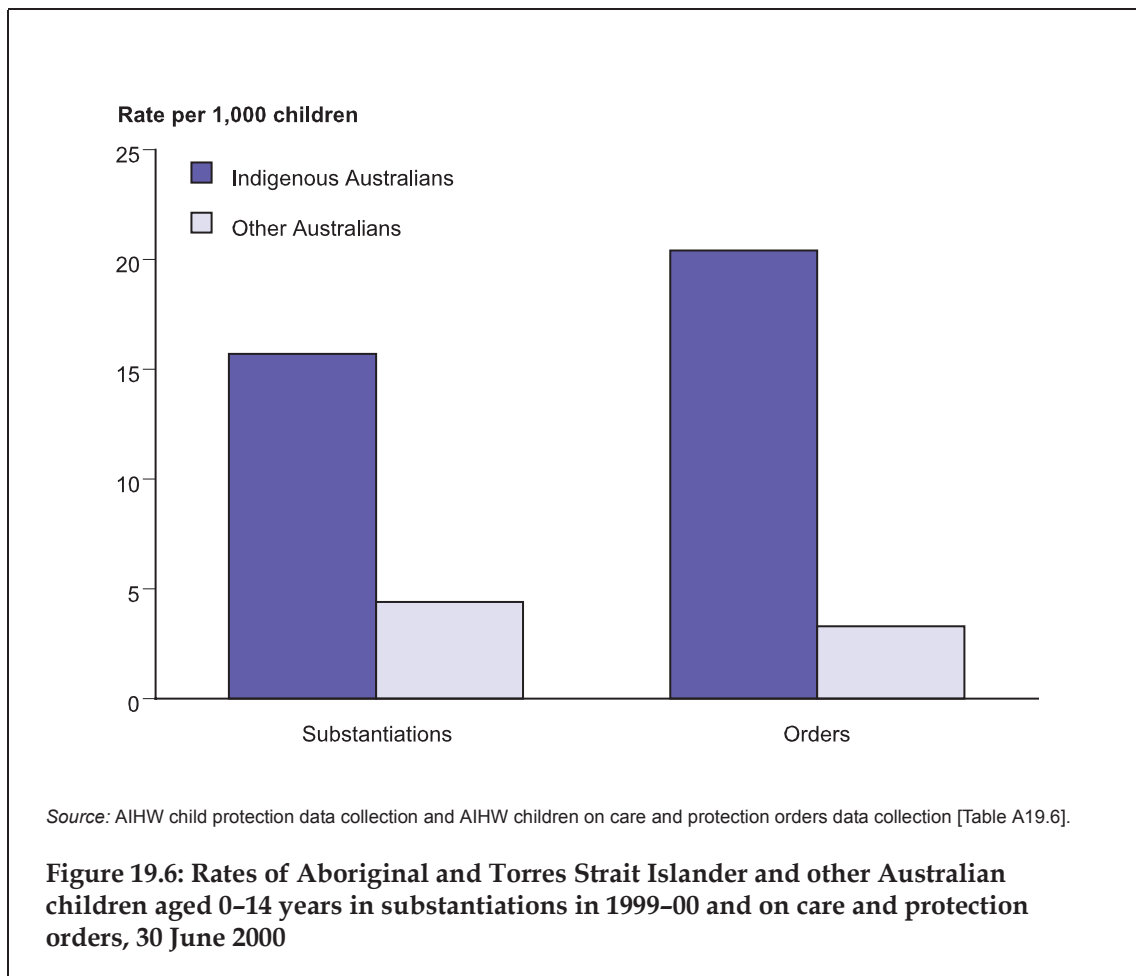
The rates of children on care and protection orders varied by age and to a lesser extent by sex (Figure 19.5).



- The rates of children on orders generally increased with the age of the child. At June 2000, rates were lowest for children under 1 (2.2 per 1,000 for male infants and 1.8 per 1,000 female infants) and highest for those aged 10-14 years (4.3 for both boys and girls).
- There was a slightly higher rate of boys on orders than of girls (4.1 compared with 3.9).

Aboriginal and Torres Strait Islander children

Aboriginal and Torres Strait Islander children are overrepresented in the child protection system. The rates of Indigenous children in substantiations in 1999-00 and on care and protection orders at 30 June 2000 were considerably higher than the rates for other Australian children.



- The rate of Indigenous children aged 0–14 years in substantiations in 1999–00 was 15.7 per 1,000, compared with 4.4 for other Australian children.
- The rate of Indigenous children on care and protection orders at 30 June 2000 was 20.4 per 1,000, compared with 3.3 for other Australian children.

There are likely to be a number of different reasons for the over representation of Indigenous children in the child protection system, including the intergenerational effects of previous separations from family and culture, the poor socioeconomic status of Indigenous families, and cultural differences in child rearing practices (HREOC 1997).