

## INTRODUCTION

Although death from Sudden Infant Death Syndrome (SIDS) is a relatively uncommon event, it is the leading cause of postneonatal infant death (aged over one month and under one year) and the human costs are significant. Apart from the loss of life, the circumstances surrounding death can be particularly difficult for family and friends to deal with.

The aims of this paper are to provide accurate and current information about SIDS to the community and to monitor the impact of the Reduce the Risks (RTR) education programs. There have been four campaigns -

- ◆ July 1990 start of RTR in Victoria
- ◆ June 1991 Reducing The Risk of SIDS program launched by SIDS and Kids (formerly the National SIDS Council of Australia)
- ◆ June 1997 Launch of KIDS&SIDS. Three Ways to Reduce the Risk program
- ◆ May 2002 Launch of SIDS and Kids Safe Sleeping Program

The recommendations of the SIDS and Kids Safe Sleeping Program are

- ◆ Put baby on back to sleep, from birth
- ◆ Sleep baby with face uncovered
- ◆ Cigarette smoke is bad for babies

These recommendations are based on the consensus of a Scientific Forum, convened in 2000 by SIDS and Kids to review the risk factors for SIDS. The forum was attended by Australasian SIDS researchers, paediatricians, pathologists and child health experts.

## DEFINITION AND CLASSIFICATION

SIDS and Kids have adopted the definition established at the Second International Conference on the Causes of Sudden Death of Infants 1969, Seattle and endorsed at the Second International Global Strategy Meeting 1994, Stavanger, Norway as the definition for a SIDS death.

This defines a SIDS death as "The sudden death of an infant or young child which is unexpected by history and in which a thorough post mortem examination fails to demonstrate an adequate cause of death."

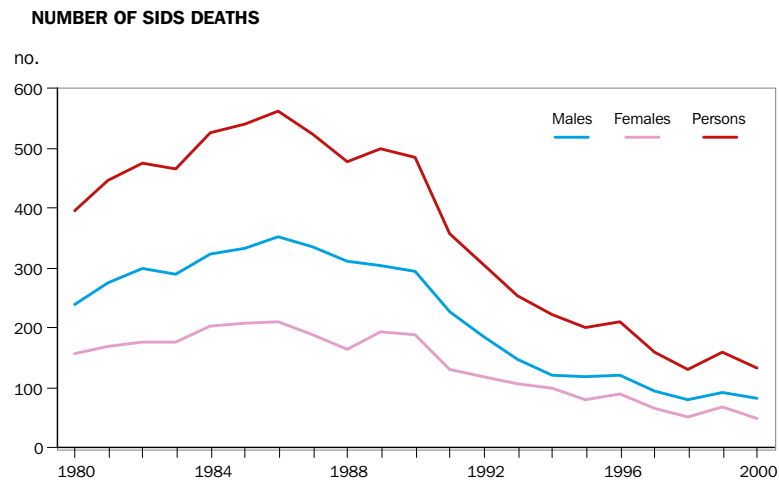
In this paper, SIDS deaths for the years 1981 - 1996 were coded to the ninth revision of the International Classification of Diseases (ICD-9) (code 798.0), while data for years 1997 - 2000 were coded to the tenth revision (ICD-10) (code R95). A notable change in coding rules between ICD revisions was that the SIDS code (R95) could only be applied to deaths of infants aged under one year. In this paper, to enable comparisons over time and to continue to measure the impact of older SIDS deaths, deaths of children aged between one and three coded to "other sudden death, cause unknown" (code R96) have been included in the SIDS counts.

For the ABS to code and classify a death to SIDS, the certifying practitioner must state on the medical certificate the term sudden infant death. In recent years there has been a growing trend to use terms such as unascertainable death as the cause and this could impact on the numbers of SIDS deaths. (Refer Appendix 1).

This paper presents death information on the basis of the year in which the death occurred and not when it was registered.

## OVERALL TRENDS

For 2000, (the latest year available) there were 134 SIDS deaths in Australia, giving an infant death rate of 0.55 per 1,000 live births. This is the second lowest rate recorded during the review period. The 2000 figure is 76% lower than the 563 deaths for 1986, the highest ever number of SIDS deaths recorded and 73% lower than 1989 the year preceding Victoria's commencement of RTR initiatives.



Due to the relatively small number of current SIDS deaths, to avoid the subsequent impact of apparent annual random fluctuations data has been aggregated and comparisons will be made between the period 1981 - 1990 (the ten years prior to the introduction of the National SIDS and Kids RTR Program) and the period 1991 - 2000 (the latest available years). Between these two periods there has been a 57% reduction in the number of SIDS deaths. This represents a reduction in the SIDS death rate per 1,000 live births of 59%.

## SEX

Over the period 1981 to 2000, SIDS deaths for males have consistently outnumbered those for females and were responsible for 62% of total deaths for 1981 - 1990 and 60% for the last ten years. Since the introduction of the National SIDS and Kids RTR program, the sex ratio has fallen from 166 male deaths per 100 female deaths to 148 per 100.

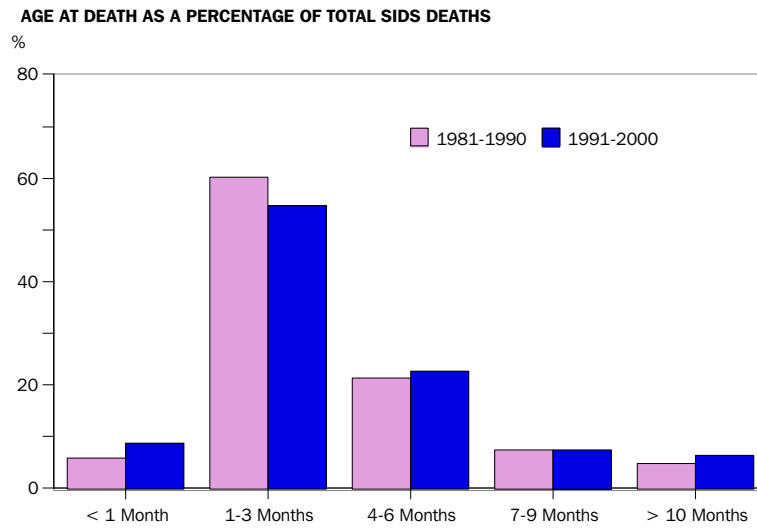
## AGE

For the period 1981 - 2000 infants aged under 6 months accounted for 83% of total SIDS deaths.

While the introduction of the National SIDS and Kids RTR program has resulted in an overall reduction in SIDS deaths, the rate of reduction by age has not been uniform.

- ◆ Infants aged under 1 month experienced the lowest rate of reduction (38%)
- ◆ Infants aged between 1 and 3 months experienced the highest rate of reduction (61%)
- ◆ Infants aged between 4 and 6 months experienced a 55% reduction
- ◆ Infants aged between 7 and 9 months experienced a 57% reduction
- ◆ Infants aged over 10 months experienced a 43% reduction

As a consequence the contribution of different age groups as a proportion of total SIDS deaths has changed since the introduction of the National SIDS and Kids RTR program.

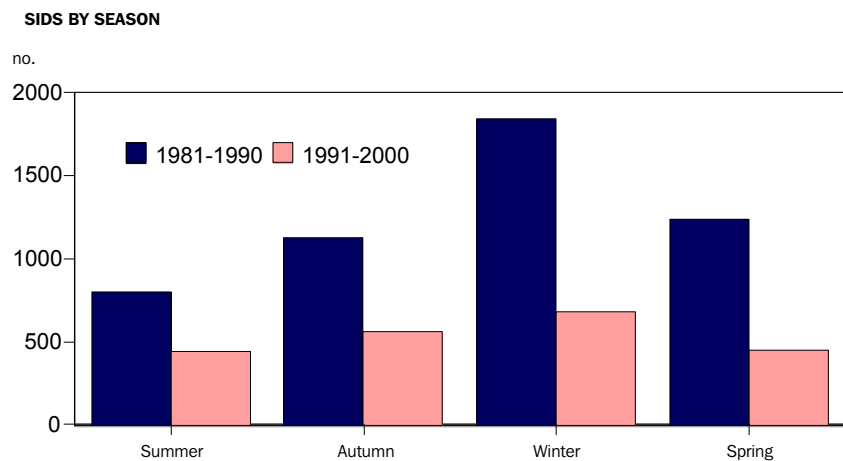


**MONTH OF DEATH**

Since the introduction of the National SIDS and Kids RTR program there has been -

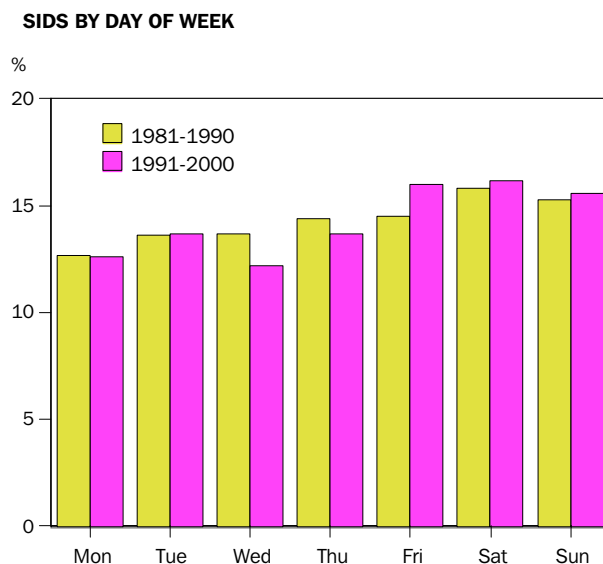
- ◆ a 44% decrease in SIDS deaths occurring in summer
- ◆ a 50% decrease in SIDS deaths occurring in autumn
- ◆ a 63% decrease in SIDS deaths occurring in winter
- ◆ a 64% decrease in SIDS deaths occurring in spring

The winter months of June, July and August are still the leading time of year for a SIDS death to occur but they are not as dominant as before the RTR program.



## DAY OF WEEK

Since the introduction of the National SIDS and Kids RTR program there has been little change in the relative proportions of total deaths recorded by days of the week. Saturday, Friday and Sunday still account for nearly 50% of total deaths recorded.



## STATE AND TERRITORY

For the period 1991 - 2000 the Australian SIDS death rate was 0.84 per 1,000 live births. The Northern Territory (2.07) had the highest rate followed by Tasmania (1.15) with Victoria having the lowest rate (0.62).

The SIDS death rate has fallen 59% since the introduction of the National SIDS and Kids RTR program. However the rate of reduction has not been uniform across State and Territories.

- ◆ Tasmania and Victoria have experienced the highest decreases in the SIDS death rate at 69% followed by South Australia (63%)
- ◆ Queensland has experienced the smallest decrease of 39%
- ◆ The Northern Territory has experienced an increase in the SIDS death rate of 11%

## INDIGENOUS STATUS

There is undercoverage of Indigenous deaths (ie while the death is recorded, it is not correctly identified as Indigenous), to some extent in all States and Territories, however data for South Australia, Western Australia and the Northern Territory are considered to be of publishable standard.

Over the period 1991 - 2000 for these States and Territories combined, the Indigenous SIDS death rate was 4.49 per 1,000 live births compared to the non-indigenous rate of 0.73 per 1,000.

## SUMMARY

The introduction of the National SIDS and Kids Reduce the Risks campaign has delivered substantial reductions in the number and rate of SIDS deaths. The RTR program has also seen some changes in the profile of SIDS deaths. For the period 1991 - 2000 the characteristics of SIDS deaths show

- ◆ Male infants are one and half times more likely to die from SIDS than females (Refer Table 1)
- ◆ The most at risk age groups are infants aged one to three months (Refer Table 2)
- ◆ The most at risk months are August, May and June (Refer Table 3)
- ◆ The most at risk days of the week are Saturday and Friday (Refer Table 4)
- ◆ The Northern Territory (2.07 deaths per 1,000 births) has the highest SIDS death rate in Australia while Victoria (0.62) has the lowest (Refer Table 5)
- ◆ Infants living outside capital cities are one and half times more likely to die of SIDS than their metropolitan counterparts (Refer Table 6)
- ◆ Infants of Aboriginal and Torres Strait Islander origin are six times more likely to die of SIDS than non-indigenous infants (Refer Table 7)

## 1. SIDS BY YEAR OF OCCURRENCE AND SEX

	NUMBER OF DEATHS .....			RATES (a).....			
	Males	Females	Persons	Males	Females	Persons	Sex Ratio (b)
1981	277	171	448	2.27	1.48	1.89	162.0
1982	301	176	477	2.45	1.52	2.00	171.0
1983	290	177	467	2.33	1.50	1.92	163.8
1984	323	203	526	2.61	1.72	2.17	159.1
1985	333	208	541	2.66	1.75	2.22	160.1
1986	352	211	563	2.82	1.78	2.31	166.8
1987	335	190	525	2.68	1.60	2.16	176.3
1988	313	166	479	2.44	1.36	1.91	188.6
1989	305	195	500	2.35	1.58	1.97	156.4
1990	295	190	485	2.20	1.49	1.85	155.3
1991	227	131	358	1.72	1.05	1.39	173.3
1992	187	120	307	1.39	0.94	1.17	155.8
1993	147	108	255	1.10	0.85	0.98	136.1
1994	122	100	222	0.91	0.79	0.85	122.0
1995	120	81	201	0.91	0.65	0.78	148.1
1996	122	90	212	0.93	0.73	0.83	135.6
1997	95	66	161	0.74	0.54	0.64	143.9
1998	81	51	132	0.64	0.42	0.54	158.8
1999	93	68	161	0.73	0.56	0.65	136.8
2000	84	50	134	0.67	0.42	0.55	168.0
1981-1990	3 124	1 887	5 011	2.48	1.58	2.04	165.6
1991-2000	1 278	865	2 143	0.98	0.70	0.84	147.7

(a) Rates are per 1,000 live births.

(b) The number of male deaths per 100 female deaths.

## 2. SIDS BY YEAR OF OCCURRENCE AND AGE AT DEATH

	<1	1	2	3	4	5	6	7	8	9	10	11	UNDER	1 YR	TOTAL
	MTH	MTH	MTHS	MTHS	MTHS	MTHS	MTHS	MTHS	MTHS	MTHS	MTHS	MTHS	1 YR	& OVER	SIDS
NUMBER OF DEATHS															
1981	24	80	101	72	43	31	21	19	15	12	5	3	426	22	448
1982	29	85	102	87	55	28	24	16	18	5	6	3	458	19	477
1983	26	86	131	78	41	37	20	13	14	8	2	0	456	11	467
1984	29	102	112	100	57	28	25	16	20	7	4	4	504	22	526
1985	37	112	119	86	51	40	26	8	17	10	6	4	516	25	541
1986	42	113	111	104	64	36	29	24	10	6	0	7	546	17	563
1987	28	104	119	91	57	29	28	23	10	13	4	3	509	16	525
1988	30	98	116	86	49	26	23	13	10	4	5	1	461	18	479
1989	28	104	127	86	52	35	14	22	5	8	3	1	485	15	500
1990	26	107	122	77	55	31	19	16	10	6	3	2	474	11	485
1991	29	65	78	55	38	37	14	9	7	3	5	1	341	17	358
1992	16	63	67	48	36	30	8	10	10	2	2	3	295	12	307
1993	24	39	57	36	21	15	13	13	4	5	8	5	240	15	255
1994	19	37	43	25	23	27	7	10	7	3	4	4	209	13	222
1995	22	42	41	30	22	10	10	5	4	5	1	1	193	8	201
1996	25	53	48	33	16	6	5	11	4	3	2	0	206	6	212
1997	17	30	31	21	22	16	7	6	3	1	0	2	156	5	161
1998	15	15	31	23	14	10	6	5	3	3	2	0	127	5	132
1999	14	38	25	26	15	14	8	9	4	1	2	1	157	4	161
2000	5	20	26	27	15	12	7	8	1	2	1	1	125	9	134
1981-1990	299	991	1 160	867	524	321	229	170	129	79	38	28	4 835	176	5 011
1991-2000	186	402	447	324	222	177	85	86	47	28	27	18	2 049	94	2 143
PERCENTAGE OF DEATHS															
1981	5.4	17.9	22.5	16.1	9.6	6.9	4.7	4.2	3.3	2.7	1.1	0.7	95.1	4.9	100.0
1982	6.1	17.8	21.4	18.2	11.5	5.9	5.0	3.4	3.8	1.0	1.3	0.6	96.0	4.0	100.0
1983	5.6	18.4	28.1	16.7	8.8	7.9	4.3	2.8	3.0	1.7	0.4	0.0	97.6	2.4	100.0
1984	5.5	19.4	21.3	19.0	10.8	5.3	4.8	3.0	3.8	1.3	0.8	0.8	95.8	4.2	100.0
1985	6.8	20.7	22.0	15.9	9.4	7.4	4.8	1.5	3.1	1.8	1.1	0.7	95.4	4.6	100.0
1986	7.5	20.1	19.7	18.5	11.4	6.4	5.2	4.3	1.8	1.1	0.0	1.2	97.0	3.0	100.0
1987	5.3	19.8	22.7	17.3	10.9	5.5	5.3	4.4	1.9	2.5	0.8	0.6	97.0	3.0	100.0
1988	6.3	20.5	24.2	18.0	10.2	5.4	4.8	2.7	2.1	0.8	1.0	0.2	96.2	3.8	100.0
1989	5.6	20.8	25.4	17.2	10.4	7.0	2.8	4.4	1.0	1.6	0.6	0.2	97.0	3.0	100.0
1990	5.4	22.1	25.2	15.9	11.3	6.4	3.9	3.3	2.1	1.2	0.6	0.4	97.7	2.3	100.0
1991	8.1	18.2	21.8	15.4	10.6	10.3	3.9	2.5	2.0	0.8	1.4	0.3	95.3	4.7	100.0
1992	5.2	20.5	21.8	15.6	11.7	9.8	2.6	3.3	3.3	0.7	0.7	1.0	96.1	3.9	100.0
1993	9.4	15.3	22.4	14.1	8.2	5.9	5.1	5.1	1.6	2.0	3.1	2.0	94.1	5.9	100.0
1994	8.6	16.7	19.4	11.3	10.4	12.2	3.2	4.5	3.2	1.4	1.8	1.8	94.1	5.9	100.0
1995	10.9	20.9	20.4	14.9	10.9	5.0	5.0	2.5	2.0	2.5	0.5	0.5	96.0	4.0	100.0
1996	11.8	25.0	22.6	15.6	7.5	2.8	2.4	5.2	1.9	1.4	0.9	0.0	97.2	2.8	100.0
1997	10.6	18.6	19.3	13.0	13.7	9.9	4.3	3.7	1.9	0.6	0.0	1.2	96.9	3.1	100.0
1998	11.4	11.4	23.5	17.4	10.6	7.6	4.5	3.8	2.3	2.3	1.5	0.0	96.2	3.8	100.0
1999	8.7	23.6	15.5	16.1	9.3	8.7	5.0	5.6	2.5	0.6	1.2	0.6	97.5	2.5	100.0
2000	3.7	14.9	19.4	20.1	11.2	9.0	5.2	6.0	0.7	1.5	0.7	0.7	93.3	6.7	100.0
1981-1990	6.0	19.8	23.1	17.3	10.5	6.4	4.6	3.4	2.6	1.6	0.8	0.6	96.5	3.5	100.0
1991-2000	8.7	18.8	20.9	15.1	10.4	8.3	4.0	4.0	2.2	1.3	1.3	0.8	95.6	4.4	100.0

### 3. SIDS BY MONTH AND YEAR OF OCCURRENCE

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL SIDS
NUMBER OF DEATHS													
1981	19	18	29	20	51	63	60	51	38	40	31	28	448
1982	22	20	34	26	54	65	68	45	52	43	24	24	477
1983	25	21	23	31	48	53	71	59	45	44	19	28	467
1984	28	23	18	37	46	57	78	61	64	44	41	29	526
1985	19	20	34	48	63	65	59	68	64	45	25	31	541
1986	31	32	27	33	57	69	72	69	54	53	40	26	563
1987	26	28	31	41	52	54	64	69	42	52	29	37	525
1988	29	32	15	37	38	50	61	58	47	38	45	29	479
1989	33	23	31	40	35	63	72	51	49	36	33	34	500
1990	29	21	32	41	56	54	62	54	47	33	24	32	485
1991	26	28	30	26	45	37	29	34	35	23	25	20	358
1992	20	24	16	27	27	34	35	32	25	26	16	25	307
1993	15	18	25	19	28	31	29	24	16	22	10	18	255
1994	15	16	17	19	16	26	18	33	12	22	14	14	222
1995	14	12	17	14	25	17	20	29	14	15	11	13	201
1996	9	15	19	18	16	28	26	21	18	13	20	9	212
1997	13	9	12	17	21	18	14	14	9	10	10	14	161
1998	9	9	10	10	15	13	15	16	6	8	10	11	132
1999	13	13	11	16	16	14	10	19	15	15	4	15	161
2000	9	12	10	11	11	12	16	21	8	6	11	7	134
1981-1990	261	238	274	354	500	593	667	585	502	428	311	298	5 011
1991-2000	143	156	167	177	220	230	212	243	158	160	131	146	2 143
PERCENTAGE OF DEATHS													
1981	4.2	4.0	6.5	4.5	11.4	14.1	13.4	11.4	8.5	8.9	6.9	6.3	100.0
1982	4.6	4.2	7.1	5.5	11.3	13.6	14.3	9.4	10.9	9.0	5.0	5.0	100.0
1983	5.4	4.5	4.9	6.6	10.3	11.3	15.2	12.6	9.6	9.4	4.1	6.0	100.0
1984	5.3	4.4	3.4	7.0	8.7	10.8	14.8	11.6	12.2	8.4	7.8	5.5	100.0
1985	3.5	3.7	6.3	8.9	11.6	12.0	10.9	12.6	11.8	8.3	4.6	5.7	100.0
1986	5.5	5.7	4.8	5.9	10.1	12.3	12.8	12.3	9.6	9.4	7.1	4.6	100.0
1987	5.0	5.3	5.9	7.8	9.9	10.3	12.2	13.1	8.0	9.9	5.5	7.0	100.0
1988	6.1	6.7	3.1	7.7	7.9	10.4	12.7	12.1	9.8	7.9	9.4	6.1	100.0
1989	6.6	4.6	6.2	8.0	7.0	12.6	14.4	10.2	9.8	7.2	6.6	6.8	100.0
1990	6.0	4.3	6.6	8.5	11.5	11.1	12.8	11.1	9.7	6.8	4.9	6.6	100.0
1991	7.3	7.8	8.4	7.3	12.6	10.3	8.1	9.5	9.8	6.4	7.0	5.6	100.0
1992	6.5	7.8	5.2	8.8	8.8	11.1	11.4	10.4	8.1	8.5	5.2	8.1	100.0
1993	5.9	7.1	9.8	7.5	11.0	12.2	11.4	9.4	6.3	8.6	3.9	7.1	100.0
1994	6.8	7.2	7.7	8.6	7.2	11.7	8.1	14.9	5.4	9.9	6.3	6.3	100.0
1995	7.0	6.0	8.5	7.0	12.4	8.5	10.0	14.4	7.0	7.5	5.5	6.5	100.0
1996	4.2	7.1	9.0	8.5	7.5	13.2	12.3	9.9	8.5	6.1	9.4	4.2	100.0
1997	8.1	5.6	7.5	10.6	13.0	11.2	8.7	8.7	5.6	6.2	6.2	8.7	100.0
1998	6.8	6.8	7.6	7.6	11.4	9.8	11.4	12.1	4.5	6.1	7.6	8.3	100.0
1999	8.1	8.1	6.8	9.9	9.9	8.7	6.2	11.8	9.3	9.3	2.5	9.3	100.0
2000	6.7	9.0	7.5	8.2	8.2	9.0	11.9	15.7	6.0	4.5	8.2	5.2	100.0
1981-1990	5.2	4.7	5.5	7.1	10.0	11.8	13.3	11.7	10.0	8.5	6.2	5.9	100.0
1991-2000	6.7	7.3	7.8	8.3	10.3	10.7	9.9	11.3	7.4	7.5	6.1	6.8	100.0

#### 4. SIDS BY YEAR OF OCCURRENCE AND DAY OF THE WEEK

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	TOTAL SIDS
NUMBER OF DEATHS								
1981	53	65	66	59	70	64	71	448
1982	61	68	66	69	73	67	73	477
1983	62	60	69	59	65	80	72	467
1984	68	65	61	85	84	78	85	526
1985	68	78	73	79	90	90	63	541
1986	64	71	96	69	82	86	95	563
1987	68	69	78	77	70	83	80	525
1988	66	66	57	69	61	85	75	479
1989	58	66	52	76	73	92	83	500
1990	67	75	69	79	61	65	69	485
1991	48	53	41	57	50	49	60	358
1992	37	51	39	43	45	46	46	307
1993	28	28	40	33	43	39	44	255
1994	29	30	23	30	38	33	39	222
1995	25	29	27	23	31	34	32	201
1996	22	30	24	30	32	41	33	212
1997	21	18	20	26	20	31	25	161
1998	17	24	15	21	12	23	20	132
1999	26	19	17	15	36	26	22	161
2000	17	12	15	16	35	25	14	134
1981-1990	635	683	687	721	729	790	766	5 011
1991-2000	270	294	261	294	342	347	335	2 143
PERCENTAGE OF DEATHS								
1981	11.8	14.5	14.7	13.2	15.6	14.3	15.8	100.0
1982	12.8	14.3	13.8	14.5	15.3	14.0	15.3	100.0
1983	13.3	12.8	14.8	12.6	13.9	17.1	15.4	100.0
1984	12.9	12.4	11.6	16.2	16.0	14.8	16.2	100.0
1985	12.6	14.4	13.5	14.6	16.6	16.6	11.6	100.0
1986	11.4	12.6	17.1	12.3	14.6	15.3	16.9	100.0
1987	13.0	13.1	14.9	14.7	13.3	15.8	15.2	100.0
1988	13.8	13.8	11.9	14.4	12.7	17.7	15.7	100.0
1989	11.6	13.2	10.4	15.2	14.6	18.4	16.6	100.0
1990	13.8	15.5	14.2	16.3	12.6	13.4	14.2	100.0
1991	13.4	14.8	11.5	15.9	14.0	13.7	16.8	100.0
1992	12.1	16.6	12.7	14.0	14.7	15.0	15.0	100.0
1993	11.0	11.0	15.7	12.9	16.9	15.3	17.3	100.0
1994	13.1	13.5	10.4	13.5	17.1	14.9	17.6	100.0
1995	12.4	14.4	13.4	11.4	15.4	16.9	15.9	100.0
1996	10.4	14.2	11.3	14.2	15.1	19.3	15.6	100.0
1997	13.0	11.2	12.4	16.1	12.4	19.3	15.5	100.0
1998	12.9	18.2	11.4	15.9	9.1	17.4	15.2	100.0
1999	16.1	11.8	10.6	9.3	22.4	16.1	13.7	100.0
2000	12.7	9.0	11.2	11.9	26.1	18.7	10.4	100.0
1981-1990	12.7	13.6	13.7	14.4	14.5	15.8	15.3	100.0
1991-2000	12.6	13.7	12.2	13.7	16.0	16.2	15.6	100.0

## 5. SIDS BY YEAR OF OCCURRENCE AND STATE AND TERRITORY OF USUAL RESIDENCE

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
NUMBER OF DEATHS									
1981	142	111	69	35	44	34	3	10	448
1982	160	114	66	51	47	26	3	10	477
1983	169	118	66	33	41	20	8	12	467
1984	193	145	61	40	55	27	3	2	526
1985	176	133	89	48	41	36	9	9	541
1986	205	142	70	45	58	26	7	10	563
1987	174	132	70	50	59	18	7	15	525
1988	178	118	54	29	58	21	8	13	479
1989	183	134	59	41	46	25	6	6	500
1990	182	104	55	35	62	30	7	10	485
1991	131	64	58	22	49	11	12	11	358
1992	108	67	54	27	24	11	10	6	307
1993	79	48	53	17	31	10	12	5	255
1994	76	38	53	13	27	10	4	1	222
1995	72	25	43	18	27	9	4	3	201
1996	70	37	45	14	23	8	11	4	212
1997	43	23	42	12	22	5	12	2	161
1998	40	24	29	11	22	2	2	2	132
1999	52	31	38	9	16	6	6	3	161
2000	50	26	37	4	9	2	2	4	134
1981-1990	1 762	1 251	659	407	511	263	61	97	5 011
1991-2000	721	383	452	147	250	74	75	41	2 143
RATES (a)									
1981	1.71	1.86	1.76	1.84	1.99	4.69	1.02	2.41	1.89
1982	1.92	1.93	1.62	2.66	2.11	3.73	0.98	2.41	2.00
1983	2.02	1.96	1.57	1.66	1.79	2.80	2.56	2.94	1.92
1984	2.30	2.40	1.51	1.98	2.41	3.73	0.96	0.48	2.17
1985	2.08	2.17	2.21	2.43	1.77	5.00	2.70	2.21	2.22
1986	2.44	2.34	1.72	2.29	2.44	3.72	2.09	2.43	2.31
1987	2.04	2.16	1.77	2.60	2.45	2.64	2.11	3.64	2.16
1988	2.05	1.86	1.31	1.50	2.33	3.05	2.34	2.97	1.91
1989	2.09	2.10	1.38	2.10	1.82	3.64	1.74	1.40	1.97
1990	2.03	1.56	1.22	1.78	2.41	4.28	2.00	2.21	1.85
1991	1.48	0.99	1.30	1.13	1.98	1.59	3.30	2.38	1.39
1992	1.19	1.02	1.16	1.37	0.96	1.57	2.68	1.35	1.17
1993	0.89	0.75	1.12	0.87	1.24	1.46	3.29	1.13	0.98
1994	0.85	0.59	1.12	0.67	1.08	1.44	1.11	0.22	0.85
1995	0.82	0.40	0.90	0.93	1.08	1.36	1.07	0.68	0.78
1996	0.80	0.60	0.95	0.75	0.92	1.25	3.08	0.93	0.83
1997	0.50	0.38	0.90	0.66	0.89	0.83	3.37	0.48	0.64
1998	0.48	0.41	0.62	0.60	0.88	0.33	0.56	0.48	0.54
1999	0.62	0.52	0.81	0.50	0.64	1.00	1.66	0.73	0.65
2000	0.59	0.44	0.79	0.23	0.37	0.35	0.55	0.95	0.55
1981-1990	2.07	2.03	1.60	2.08	2.16	3.74	1.87	2.31	2.04
1991-2000	0.83	0.62	0.97	0.78	1.01	1.15	2.07	0.95	0.84

(a) Rates are per 1,000 live births.

## 6. SIDS BY YEAR OF OCCURRENCE AND REGION (a)

	NUMBER OF DEATHS.....				RATES (b).....			
	CAPITAL CITIES	OTHER URBAN	RURAL AUST	TOTAL AUST(c)	CAPITAL CITIES	OTHER URBAN	RURAL AUST	TOTAL AUST (c)
1991	197	75	86	358	1.24	1.61	1.67	1.39
1992	160	54	93	307	0.98	1.12	1.79	1.17
1993	149	59	47	255	0.93	1.23	0.92	0.98
1994	123	45	54	222	0.76	0.94	1.08	0.85
1995	98	48	54	201	0.61	1.02	1.10	0.78
1996	115	42	55	212	0.72	0.90	1.16	0.83
1997	78	34	49	161	0.49	0.75	1.06	0.64
1998	66	27	39	132	0.42	0.61	0.85	0.54
1999	85	31	45	161	0.54	0.70	1.01	0.65
2000	76	30	28	134	0.48	0.69	0.65	0.55
1991-2000	1 147	445	550	2 143	0.72	0.96	1.15	0.84

(a) Capital Cities are defined as the Capital City Statistical Divisions; Other Urban as areas containing a population of more than 20,000 persons; Rural is defined as the balance.

(b) Rates are per 1,000 live births.

(c) Includes usual residence overseas.

## 7. SIDS BY YEAR OF OCCURRENCE AND INDIGENOUS STATUS (a)

	NUMBER OF DEATHS.....			RATES (b).....		
	INDIGENOUS	NON-INDIGENOUS	TOTAL (c)	INDIGENOUS	NON-INDIGENOUS	TOTAL (c)
1991	20	63	83	9.61	1.38	1.74
1992	20	41	61	6.10	0.91	1.26
1993	20	40	60	5.81	0.89	1.24
1994	12	32	44	3.54	0.72	0.91
1995	15	34	49	4.44	0.76	1.02
1996	19	29	48	5.61	0.66	1.01
1997	17	29	46	5.18	0.67	0.99
1998	11	24	35	3.28	0.55	0.75
1999	10	19	31	2.77	0.45	0.67
2000	3	9	15	0.84	0.22	0.33
1991-2000	147	320	472	4.49	0.73	1.00

(a) Data for only South Australia, Western Australia and the Northern Territory combined as these are the only States and Territories where indigenous origin is considered to be of publishable standard for this time series.

(b) Rates are per 1,000 live births.

(c) Includes not stated origin.

# APPENDIX 1 ILL DEFINED AND UNKNOWN CAUSES .....

## A1.1 ILL DEFINED AND UNKNOWN CAUSES, By age

Year	SIDS	Unattended death (a).....			Other ill defined and unknown causes (b)..			TOTAL
		Under 1	1 - 3 years	Total under 3 years	Under 1	1 - 3 years	Total under 3 years	
1981	448	0	0	0	0	6	6	454
1982	477	0	0	0	3	4	7	484
1983	467	0	1	1	1	0	1	469
1984	526	1	1	2	10	1	11	539
1985	541	2	0	2	1	3	4	547
1986	563	0	1	1	0	0	0	564
1987	525	1	1	2	5	1	6	533
1988	479	0	0	0	1	0	1	480
1989	500	0	0	0	7	5	12	512
1990	485	0	0	0	8	2	10	495
1991	358	1	2	3	1	2	3	364
1992	307	2	1	3	2	2	4	314
1993	255	2	1	3	2	2	4	262
1994	222	1	1	2	3	3	6	230
1995	201	2	0	2	5	1	6	209
1996	212	4	3	7	1	0	1	220
1997	161	4	2	6	4	0	4	171
1998	132	1	2	3	22	6	28	163
1999	161	2	2	4	11	5	16	181
2000	134	13	2	15	5	1	6	155

(a) For years 1981 - 1996 ICD 9 code 798.9 and for 1997 onwards ICD 10 code R98

(b) For years 1981 - 1996 ICD 9 codes 799.8 and 799.9 and for 1997 onwards ICD 10 code R99

## APPENDIX 2 DATA USED IN CALCULATING RATES .....

### A2.1 LIVE BIRTHS, By year of occurrence and sex .....

Year	Males	Females	Persons
1981	122 085	115 454	237 539
1982	122 658	115 973	238 631
1983	124 670	118 177	242 847
1984	123 849	118 110	241 959
1985	124 955	118 655	243 610
1986	124 931	118 284	243 215
1987	125 012	118 469	243 481
1988	128 320	121 938	250 258
1989	129 996	123 536	253 532
1990	134 384	127 174	261 558
1991	132 039	124 952	256 991
1992	134 815	127 962	262 777
1993	133 503	126 336	259 839
1994	133 718	126 398	260 116
1995	132 143	125 390	257 533
1996	130 784	123 574	254 358
1997	128 276	121 939	250 215
1998	126 466	120 260	246 726
1999	127 039	120 905	247 944
2000	125 572	119 255	244 827

### A2.2 LIVE BIRTHS, By year of occurrence and usual residence of mother .....

#### STATE AND TERRITORY OF USUAL RESIDENCE.....

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.(a)
1981	83 205	59 532	39 279	19 073	22 100	7 246	2 955	4 149	237 539
1982	83 257	59 153	40 632	19 153	22 252	6 979	3 049	4 156	238 631
1983	83 459	60 192	42 051	19 874	22 940	7 134	3 120	4 076	242 847
1984	83 790	60 301	40 406	20 153	22 820	7 236	3 110	4 142	241 959
1985	84 583	61 156	40 296	19 766	23 205	7 196	3 332	4 075	243 610
1986	84 054	60 634	40 645	19 670	23 753	6 998	3 348	4 113	243 215
1987	85 160	61 192	39 622	19 208	24 039	6 815	3 323	4 122	243 481
1988	86 781	63 276	41 333	19 305	24 885	6 887	3 419	4 372	250 258
1989	87 532	63 774	42 776	19 546	25 294	6 866	3 445	4 299	253 532
1990	89 606	66 592	44 933	19 716	25 681	7 011	3 498	4 521	261 558
1991	88 290	64 710	44 611	19 471	24 736	6 925	3 631	4 616	256 991
1992	90 671	65 622	46 472	19 778	25 062	7 009	3 730	4 432	262 777
1993	88 898	64 217	47 149	19 640	24 990	6 835	3 652	4 418	259 839
1994	88 979	64 208	47 376	19 461	25 036	6 926	3 597	4 489	260 116
1995	87 909	62 768	47 729	19 280	24 997	6 638	3 729	4 427	257 533
1996	87 439	61 662	47 140	18 768	25 012	6 401	3 575	4 312	254 358
1997	86 156	60 591	46 742	18 304	24 661	6 013	3 557	4 145	250 215
1998	83 996	59 174	46 567	18 211	24 950	6 079	3 554	4 162	246 726
1999	84 459	60 115	46 693	18 005	24 918	5 976	3 620	4 123	247 944
2000	84 420	58 693	46 668	17 351	24 072	5 723	3 658	4 202	244 827

(a) Includes Other Territories.