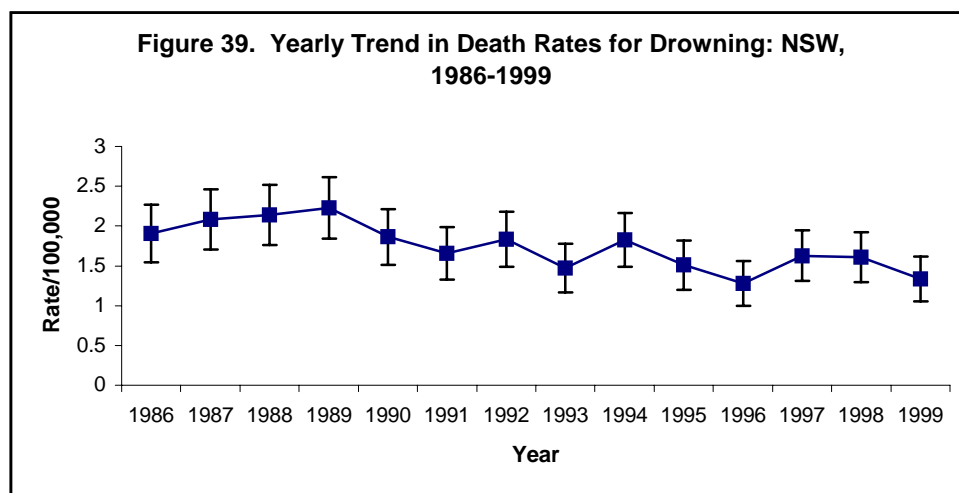


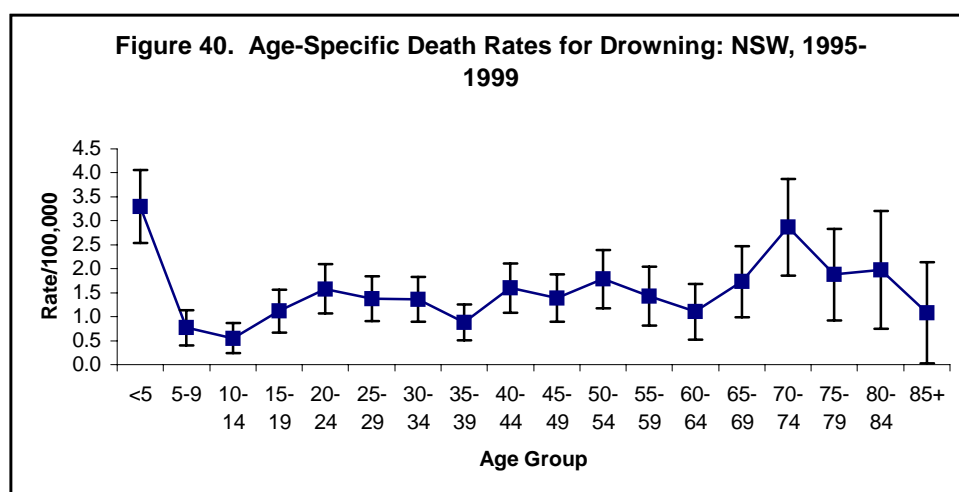
## 10.0 DROWNING

### 10.1 Deaths due to Drowning:

The drowning death rate showed a statistically significant decrease between 1989 and 1999 (Figure 39). Between 1995 and 1999, 465 people died from drowning, at a rate of 1.5 people /100,000 and 79 percent were male (Table 4).

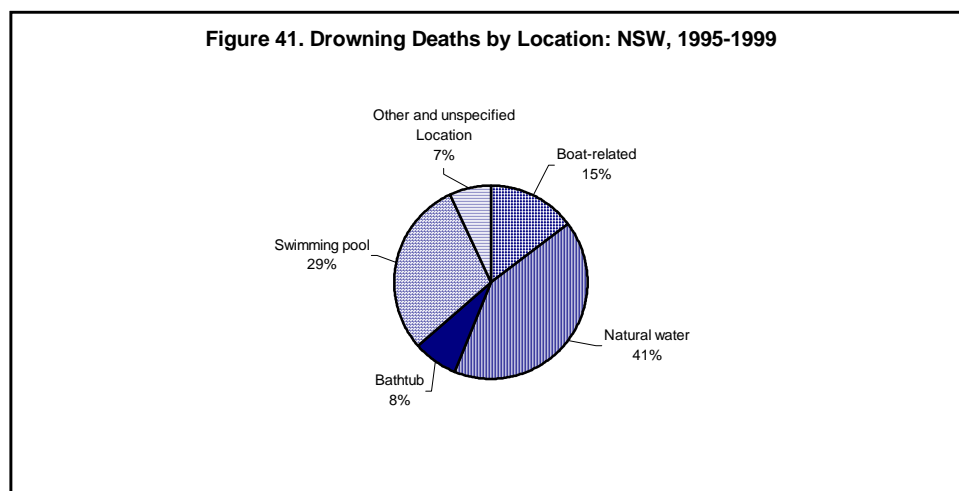


Of the 465 drowning deaths in NSW between 1995 and 1999, approximately 15 percent of cases were under age five. Figure 40 illustrates the age-specific death rates for drowning.



People under age five were at greatest risk of dying as a result of a drowning compared to other age groups, except for 70 to 74 year olds who also showed a higher drowning rate between 1995 and 1999. Males were 2.8 times more likely than females to die as the result of a drowning.

The following chart (See Figure 41) shows the percentage of deaths by various locations of drowning.



The majority of drownings occurred in either natural water (41 %) or in a swimming pool (29 %). The location of the drowning could not be coded in only very few cases. .

Table 27. Number of Drowning Deaths and Death Rates/100,000\* by Location: NSW, 1995-1999

<b>Injury Mechanism</b>	<b>Total Number</b>	<b>Rate /100,000</b>	<b>Number of Males</b>	<b>Male Rate /100,000</b>	<b>Number of Females</b>	<b>Female Rate /100,000</b>
Natural water	192	0.6	163	1.0	29	0.2
Swimming pool	137	0.4	99	0.6	38	0.2
Boat-related	69	0.2	68	0.4	1	0.0
Bathhtub	35	0.1	11	0.1	24	0.2
Other and unspecified Location	32	0.1	25	0.2	7	0.0

\*Death rates have been age-adjusted using the 1991 Australian census population

Table 27 shows the number of drowning deaths and death rates by the location of the drowning for all persons, males and females from 1995 to 1999. Males accounted for 85 percent of all drownings occurring in natural water, almost all boar-related deaths and around three-quarters of all swimming pool deaths. Females drowned in bathtubs more than twice as often as males.

Table 28 shows drowning deaths by age group and location in NSW for 1995-1999. Three locations account for the leading place of drowning deaths for all age groups - natural water, bathtub and swimming pool. People aged five to 64 years drowned most often in natural water. For children aged one to four years swimming pools were very clearly the most common location of drowning deaths and they accounted for the largest single group of drownings. People aged 65 years and older also drowned most often in swimming pools, but a significant number also drowned in natural water. Children under age one year drowned most often in bathtubs.

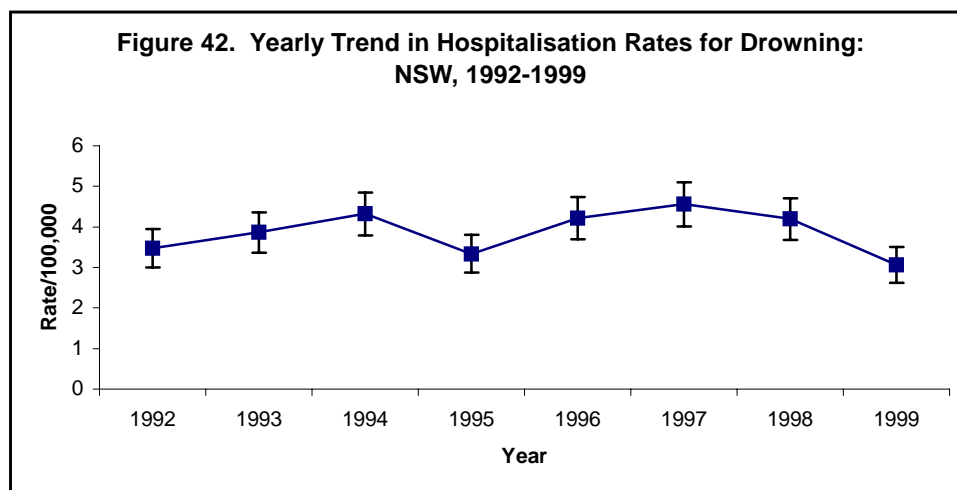
Table 28. Drowning Deaths by Age Group and Location: NSW, 1995-1999

	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Bathtub 10	Swimming pool 42	Natural water 8	Natural water 8	Natural water 35	Natural water 33	Natural water 35	Natural water 30	Natural water 18	Swimming pool 29	Natural water 192
2	Swimming pool #	Bathtub 9	Swimming pool 7	Boat-related #	Swimming pool 14	Boat-related 15	Boat-related 12	Boat-related 15	Swimming pool 9	Natural water 22	Swimming pool 137
3		Other and unspecified 6	Other and unspecified #	Swimming pool #	Boat-related 6	Swimming pool 11	Swimming pool 8	Swimming pool 14	Boat-related 5	Boat-related 13	Boat-related 69
4			Boat-related #	Other and unspecified #	Other and unspecified #	Other and unspecified 5	Other and unspecified #	Other and unspecified #	Bathtub #	Other and unspecified 9	Bathtub 35
5					Bathtub #	Bathtub #	Bathtub #		Other and unspecified #	Bathtub 8	Other and unspecified 32

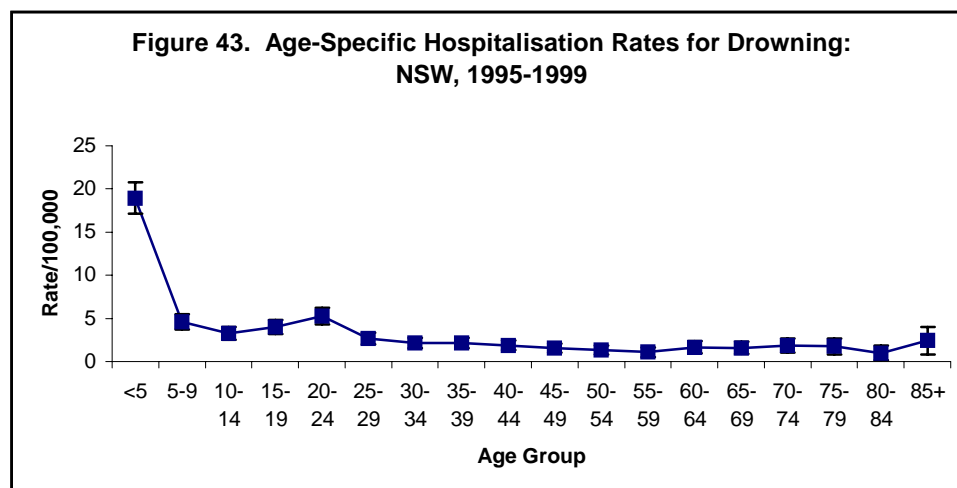
# Cell size less than five cases

## 10.2 Hospitalisations due to Near-Dr owning:

The near-drowning hospitalisation rate showed a statistically significant increase from 1995 to 1997 and then showed a statistically significant decrease from 1997 to 1999 (Figure 42). Between 1995 and 1999, 1,168 people were hospitalised for a near-drowning, at a rate of 3.9 people /100,000 and 68 percent were male (Table 6).



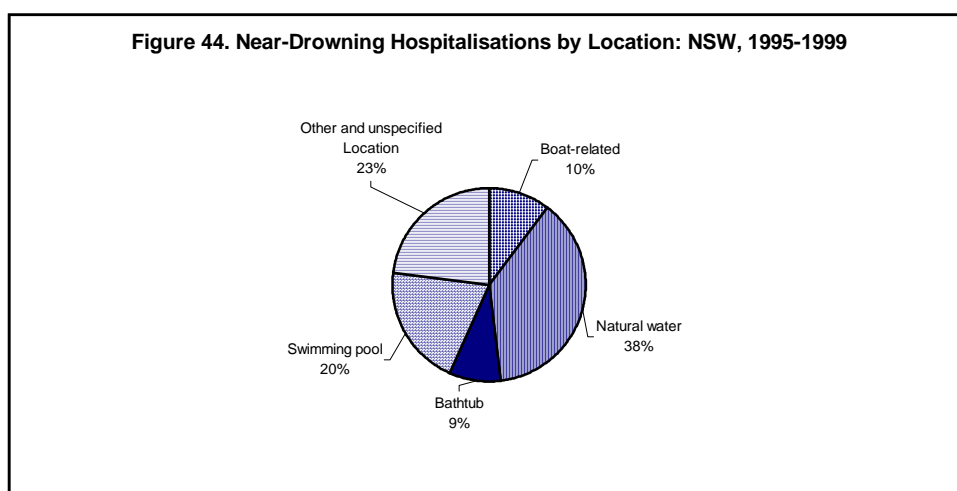
Of the 1,168 drowning hospitalisations in NSW between 1995 and 1999, approximately 35 percent of cases were under age five. Figure 43 illustrates the age-specific hospitalisation



rates for drowning.

People under age five were at greatest risk of being hospitalised as a result of a near drowning between 1995 and 1999. Males were twice as likely as females to be hospitalised as the result of a near drowning.

The following chart (see Figure 44) shows the percentage of hospitalisations by various locations of drowning.



Natural water settings (38 %) and swimming pools (20 %) were the most common locations where near-drowning requiring hospitalisation occurred. For 23 percent of near-drowning cases, the location was classified as other and unspecified. Further analysis showed that the location of approximately five percent of all hear drowning hospitalisations was classified as unspecified.

Table 29. Number of Near-Drowning Hospitalisations and Hospitalisation Rates/100,000\* by Location: NSW, 1995-1999

<b>Injury Mechanism</b>	<b>Total Number</b>	<b>Rate /100,000</b>	<b>Number of Males</b>	<b>Male Rate /100,000</b>	<b>Number of Females</b>	<b>Female Rate /100,000</b>
Natural water	442	1.5	325	2.2	117	0.8
Other and unspecified Location	269	0.9	174	1.1	95	0.6
Swimming pool	236	0.8	152	1.0	84	0.6
Boat-related	120	0.4	89	0.6	31	0.2
Bathtub	101	0.3	52	0.3	49	0.3

\*Hospitalisation rates have been age-adjusted using the 1991 Australian census population

Table 29 shows the number of near-drowning hospitalisations and hospitalisation rates by the location of the near drowning for all persons, males and females from 1995 to 1999. Males accounted for 74 percent of all near-drownings occurring in natural water. Males also accounted for 74 percent of all boat-related near-drownings and 65 percent of all near-drownings occurring in swimming pools. Near-drownings in bathtubs involved males and females in almost equal proportions.

Table 30 shows near-drowning hospitalisations by age group and location in NSW for 1995-1999. Three locations account for the leading place of near-drowning hospitalisations for all age groups - natural water, bathtub and swimming pool. People aged five to 65 years and older were hospitalised most often for a near-drowning in natural water. Children aged one to four years were hospitalised most often for a near-drowning in a swimming pool. Children under age one year were hospitalised most often for a near-drowning in a bathtub. Two clear groups stand out as accounting for the largest number of near-drownings; swimming pools for 1 to 4 year olds and natural water for 15 to 24 year olds. For 25 to 54 year olds, a noteworthy minority of near-drownings was boat-related.

Table 30. Near-Drowning Hospitalisations by Age Group and Location: NSW, 1995-1999

	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
<b>1</b>	Bathtub 59	Swimming pool 135	Natural water 41	Natural water 39	Natural water 136	Natural water 59	Natural water 46	Natural water 29	Natural water 19	Natural water 21	Natural water 442
<b>2</b>	Swimming pool 7	Other and unspecified 126	Swimming pool 29	Other and unspecified 14	Other and unspecified 32	Boat-related 25	Boat-related 28	Boat-related 12	Boat-related 11	Other and unspecified 18	Other and unspecified 269
<b>3</b>	Natural water 5	Natural water 47	Other and unspecified 24	Swimming pool 11	Boat-related 20	Other and unspecified 20	Other and unspecified 14	Other and unspecified 11	Other and unspecified 5	Boat-related 16	Swimming pool 236
<b>4</b>	Other and unspecified 5	Bathtub 29	Bathtub 5	Boat-related 5	Swimming pool 18	Swimming pool 11	Swimming pool 9	Swimming pool 7	Swimming pool 1	Swimming pool 8	Boat-related 120
<b>5</b>		Boat-related #	Boat-related #	Bathtub #		Bathtub #			Bathtub #	Bathtub #	Bathtub 101

# Cell size less than five cases

### 10.3 Summary

Recent trends have been decreasing for both death rates for drowning and hospitalisation rates for near-drowning. The difference between death and hospitalisation rates for drowning-related injury was markedly smaller than for other types of injury, indicating the general severity of drowning injury. Babies and small children were most at risk. Under five year olds had the highest drowning death rates followed by a smaller peak for 70 to 74 year olds. For drowning-related hospitalisations, the only group to stand out was again under five year olds who had around four times the rate of near-drowning as all other age groups.

The locations of drowning and near-drowning were very similar. Most drowning and near-drowning occurred in natural water, followed by swimming pools. There was a slightly higher percentage of deaths due to swimming pool and boat-related drowning than hospitalisations for near-drowning. For nearly one-quarter of hospitalisations for near-drowning the location could not be specified, compared to only seven percent for drowning deaths.

Males were involved in around three-quarters or more of all drowning deaths and near-drowning hospitalisations for all types of locations. The only exception was bathtubs where near-drowning was likely to involve either gender and drowning in bathtubs was more likely to involve females, although this may be influenced by the relatively small numbers of drowning deaths. Across age groups there was little difference between the patterns of drowning and near-drowning. One of the few exceptions was the considerably higher number of drownings in swimming pools for over 65 year olds compared to near-drownings which were relatively uncommon in swimming pools.