Electrical
Regulatory
Authorities
Council

Electrical Incident Data

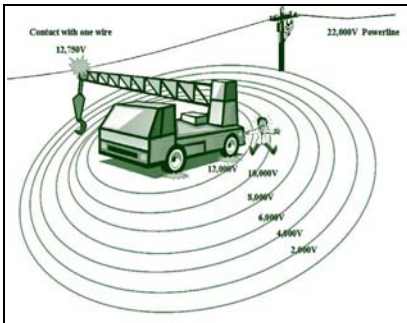
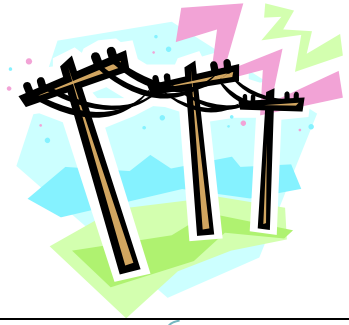
Australia & New Zealand 2005 - 06

Definitions

"Customer's Installation"	means all parts of an electrical installation past the point of supply on the consumer side.
"Distribution or Supply Equipment"	means equipment used in the generation, transmission, supply or distribution of electricity.
"Electrical Worker"	means a person who carries out electrical work and is licensed or authorised to do so.
"General Public"	means a person who is not doing any work as part of his or her employment or under a contract of work or training at the time the incident occurs
"Misuse/Interference"	means to damage, mishandle or use equipment in a way that it is not intended or for what it is designed.
"Non Electrical Worker"	means a person who is in the process of carrying out their occupation and is not an electrical worker.
"Supply Worker"	means a person who is employed by or under te control of a network operator.
"Work Practice"	means the process or method by which work is carried out.

QUICK FACTS 2005-06

24 deaths were recorded in Australia and New Zealand in 2005-06. This is equivalent to 0.97 deaths per million population.

	**All 8 distribution network related deaths were as a result of accidental contact with electricity supply overhead conductors**
	**95.7% of the number of deaths associated with the electricity supply network from 2001 to 2006 involved contact with overhead conductors**
	**16 deaths involved customer's installations, appliances or equipment**
	**Of the people who were electrocuted, 71% were either non-electrical workers or general public.**

Electrical Incident Data

This report covers the 12 month period from 1 July 2005 to 30 June 2006. It is based on details of incidents reported to electrical safety regulators in Australia and New Zealand.

Due to differences in reporting definitions and requirements, this comparative report concerns accidental electrical fatalities only.

Out of 24 deaths (excluding suicides) reported in the financial year, 8 deaths (36%) involved the electricity supply networks while 16 (67%) involved customers installations, appliances or equipment. All 8 deaths involving electricity supply networks were associated with energised overhead conductors.

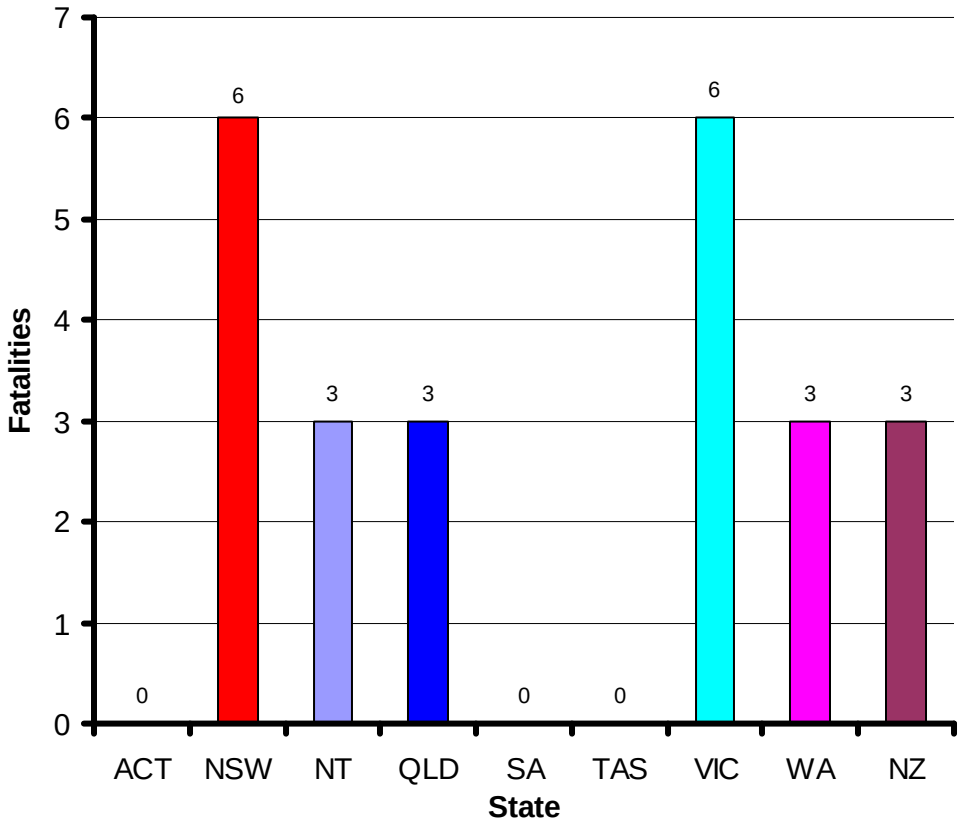
The number of fatal accidents has fluctuated over the past few years with a 31% decrease in this year following a 75% increase in the previous year (2004-05).

The statistics from 2001-02 to 2005-06 continue to show that most electrical deaths associated with electricity networks are as a result of working on or near energised overhead conductors. 95.7% of electrical deaths associated with electricity supply networks involved overhead conductors (out of 47 deaths involving the electricity supply networks over the last 5 year period, 45 were due to contact with energised overhead conductors).

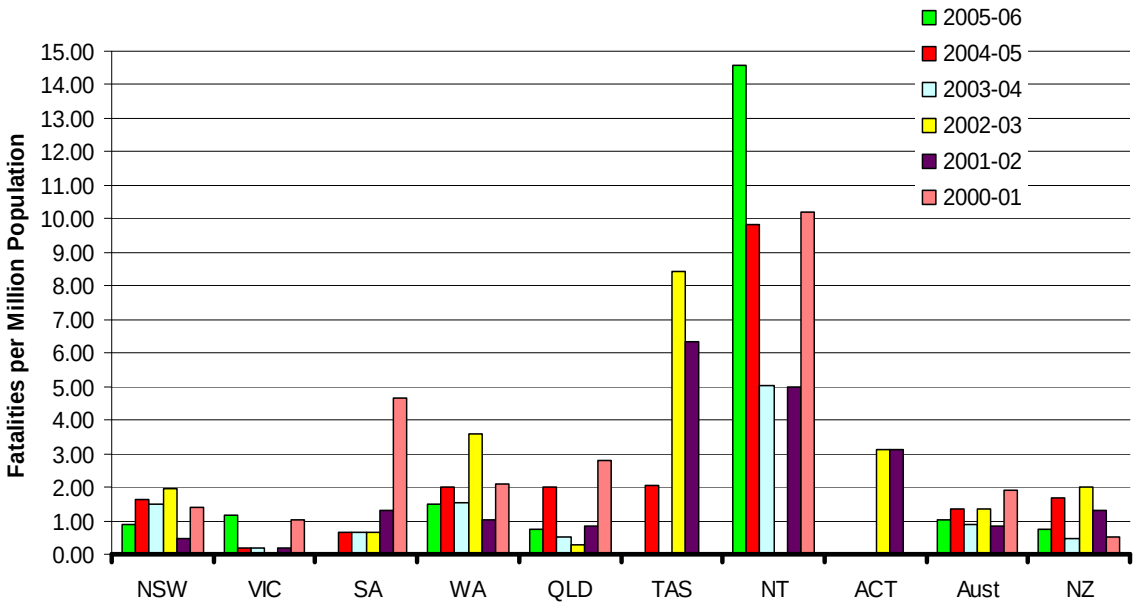
This report presents the information in a series of charts and tables.

1. Regional Deaths 2005-06

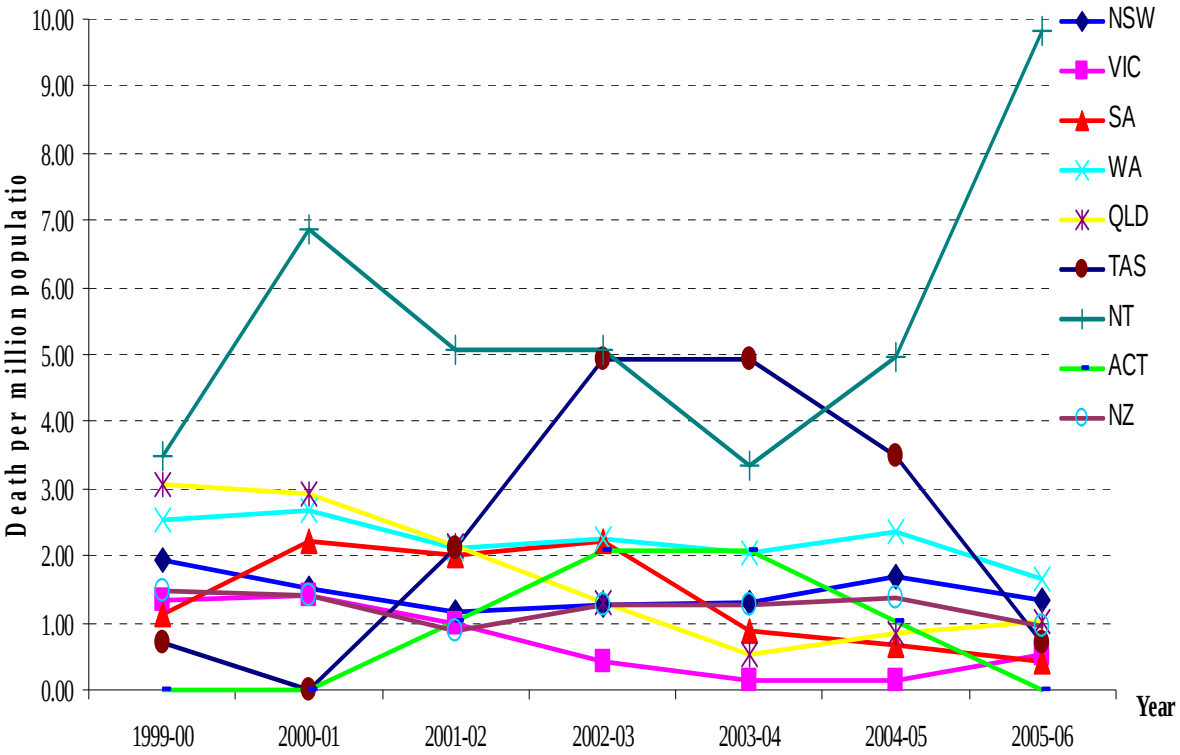
GRAPH 1.1 Australian & NZ Electrical Deaths 2005-06



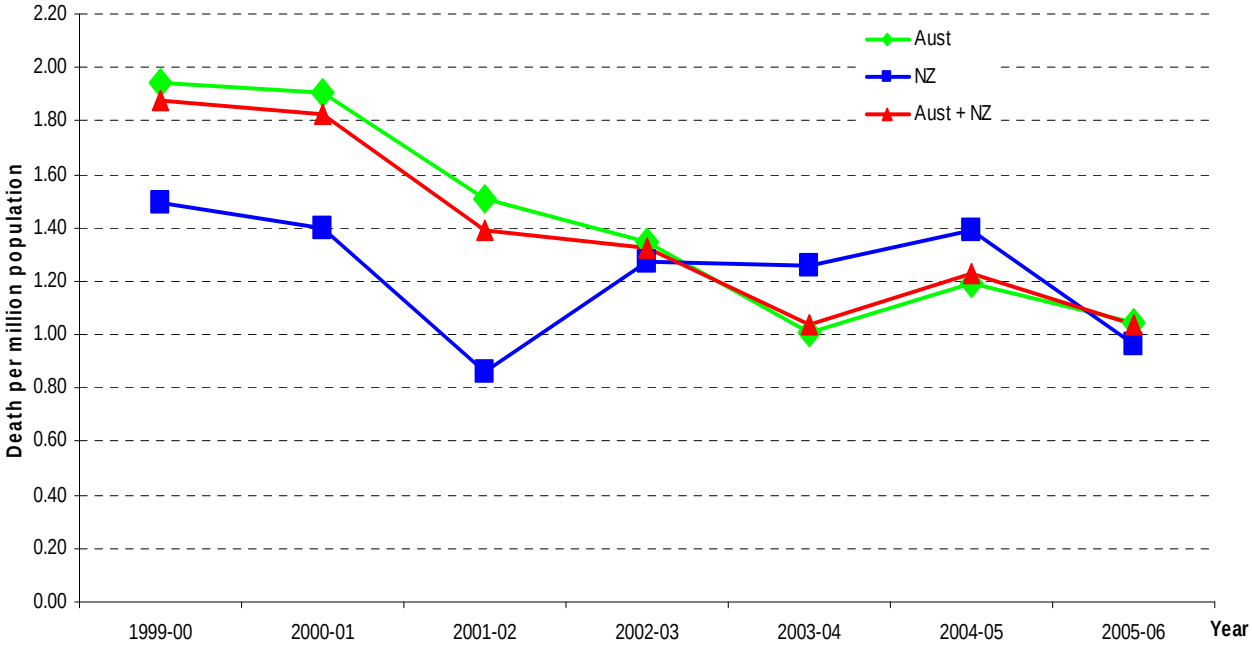
GRAPH 1.2 Electrical Deaths per Million Population from 2000 to 2006



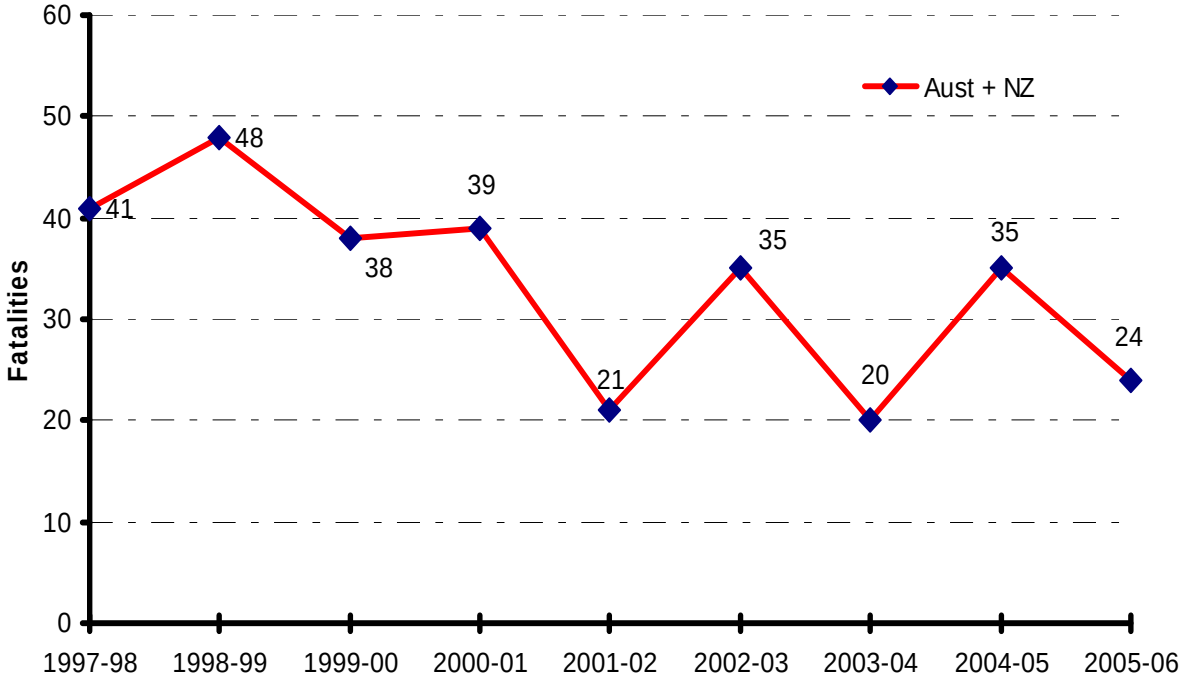
GRAPH 1.3 Trend in Electrocutions with 3 Year Moving Average per Million Population



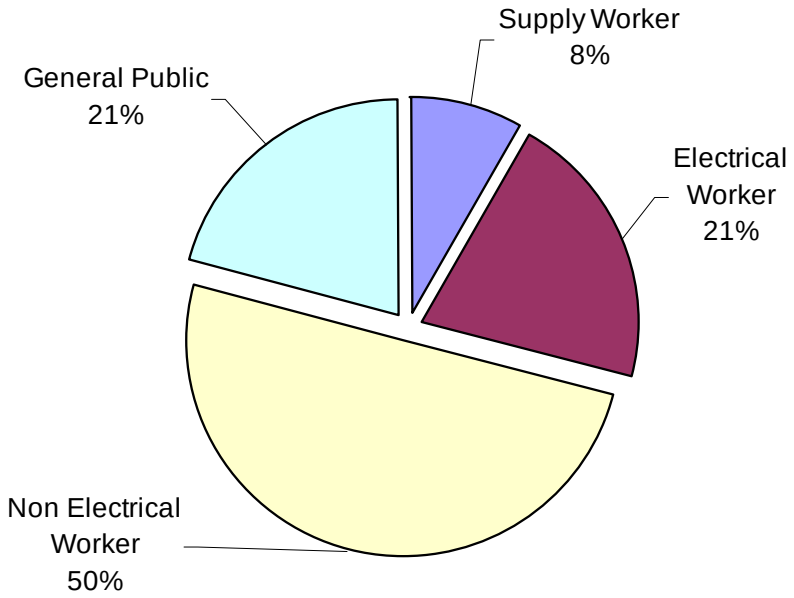
GRAPH 1.4 Trend in Electrocutions with 3 Year Moving Average per Million Population in Australia & New Zealand



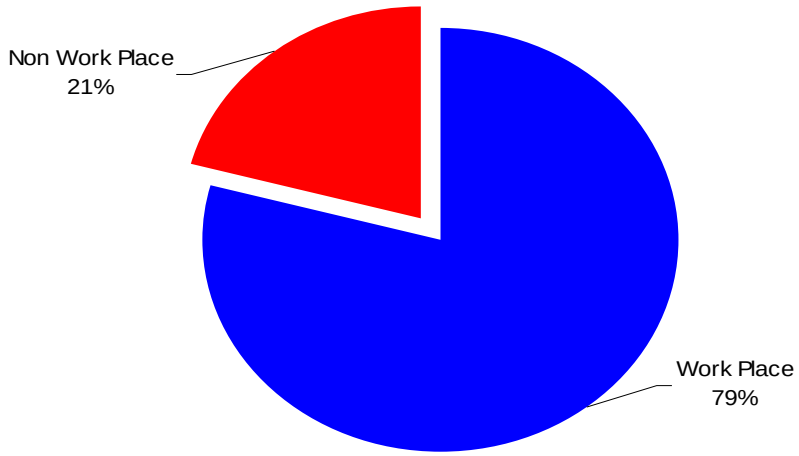
GRAPH 1.5 Total Number of Deaths in Australia and New Zealand



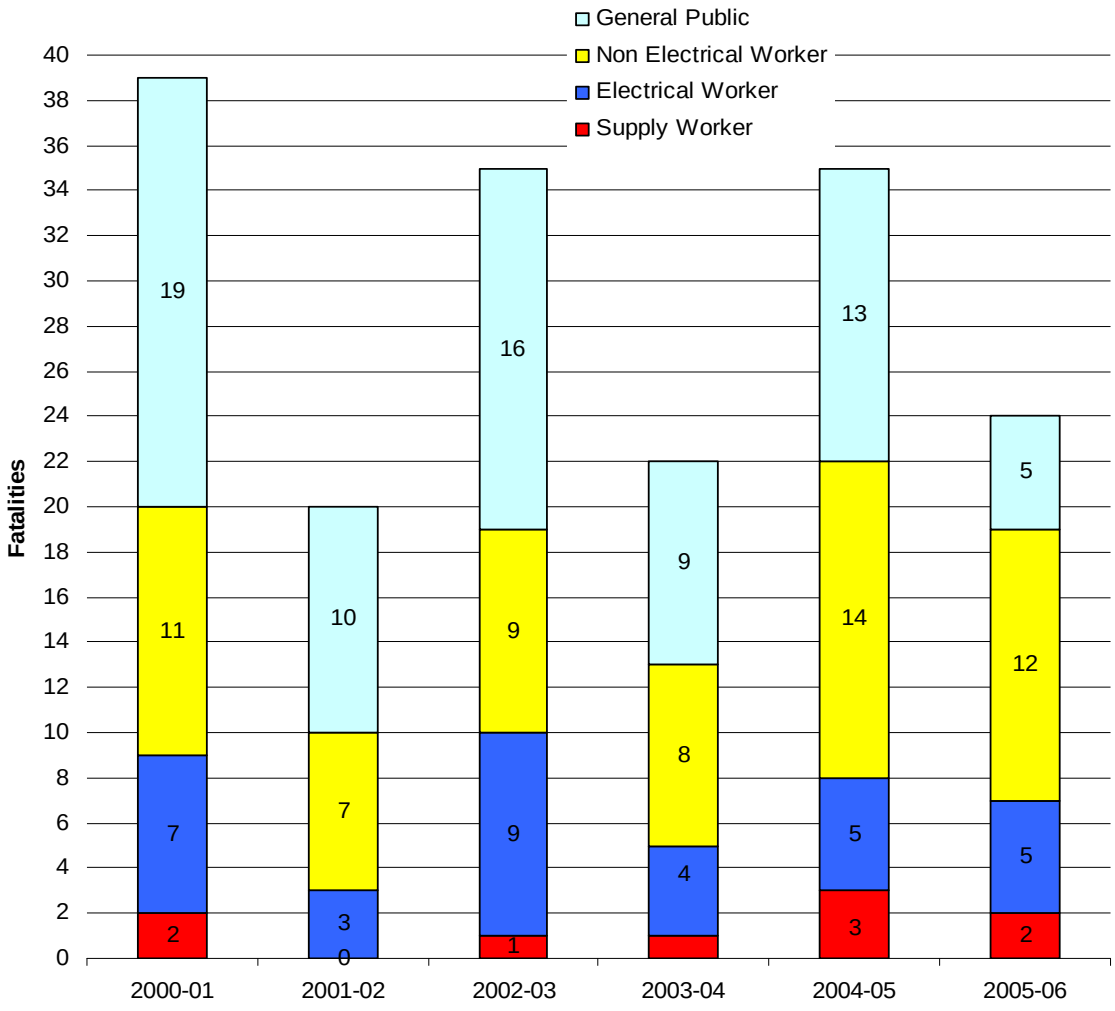
GRAPH 1.6 Aust & NZ Deaths Categories 2005-06



GRAPH 1.7 Deaths: Work Place Versus Non—Work Place 2005-06

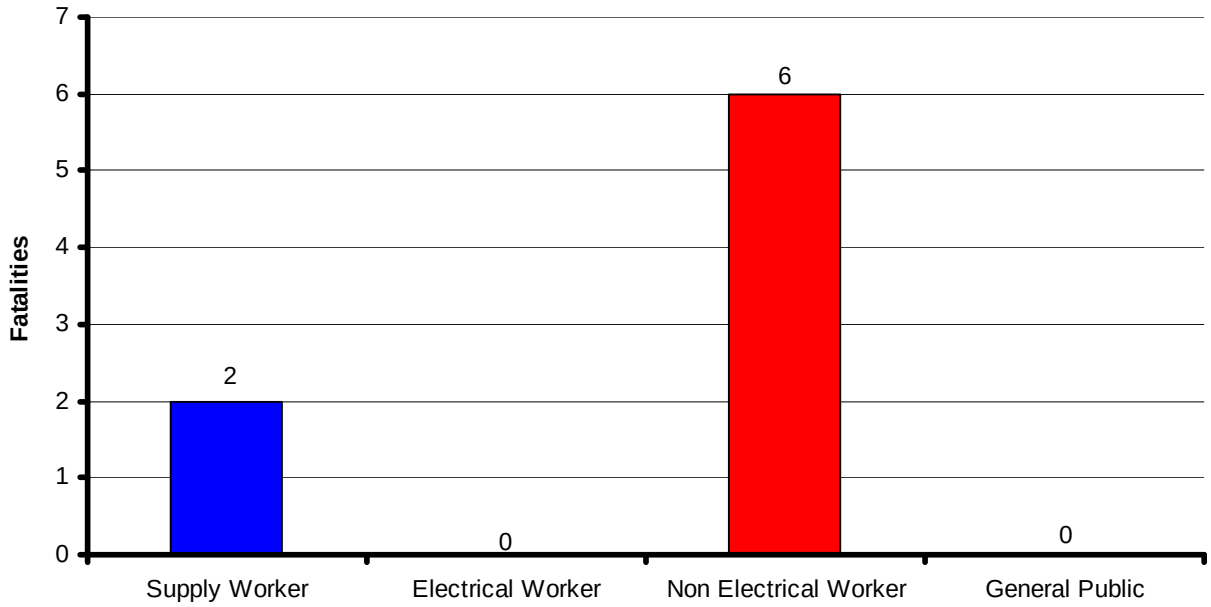


GRAPH 1.8 Deaths sorted by Victim Categories 2000 - 2006

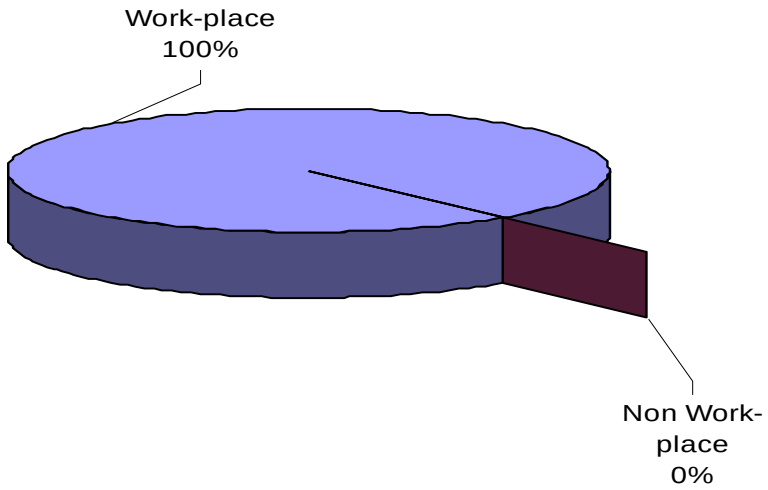


2. Deaths involving Network Assets

GRAPH 2.1 Deaths Involving Electricity Supply Assets 2005-06 sorted by victim category

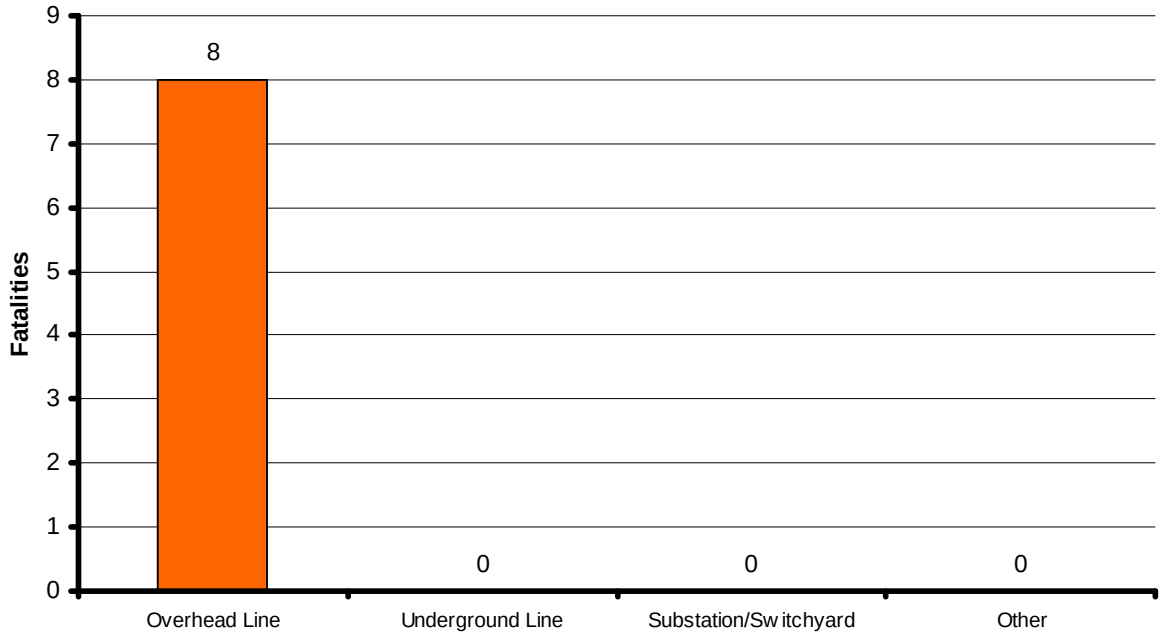


GRAPH 2.2 Death involving Electricity Supply Assets: Work Place Versus Non-work Place 2005-06

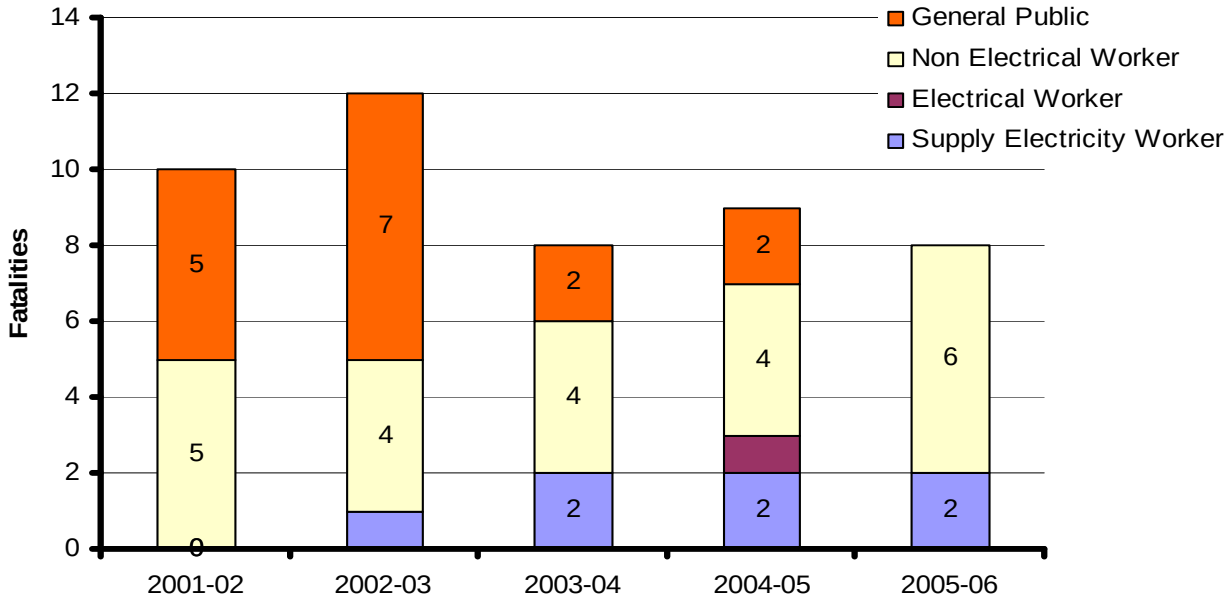


NB All 8 Electricity Supply Asset related deaths in 2005-06 occurred during the course of work.

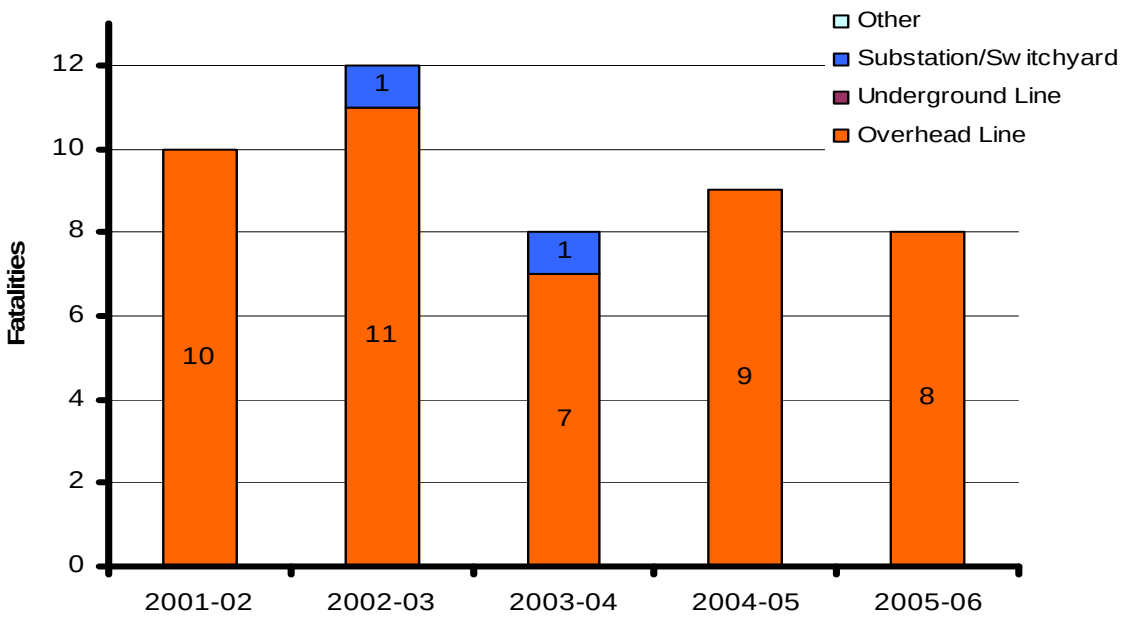
GRAPH 2.3 Deaths Involving Electricity Supply Assets 2005-06 Sorted by Asset Types



GRAPH 2.4 Deaths Involving Electricity Supply Assets from 2001 to 2006 Sorted by Victim's Categories

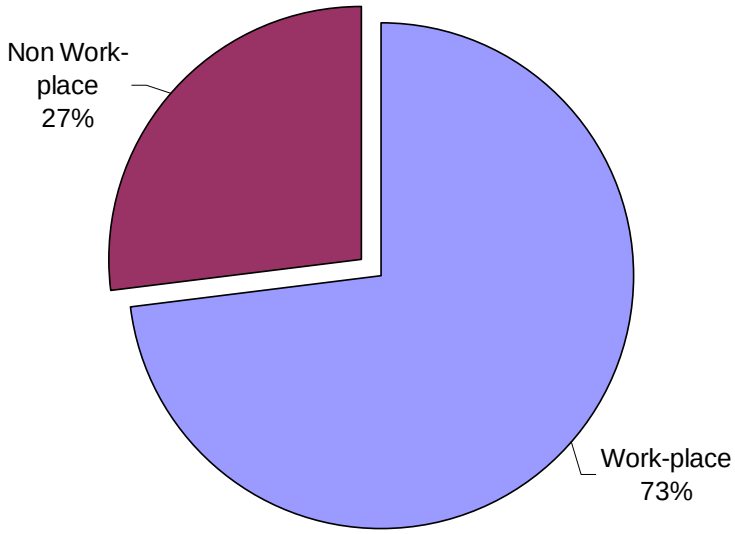


GRAPH 2.5 Deaths Involving Electricity Supply Assets from 2001 to 2006 Sorted by Asset Types



NB. **95.7% of deaths associated with Network Assets over 5 years from 2001 to 2006 involved overhead conductors. The other 4.3% involved equipment in a substation or switchyard**

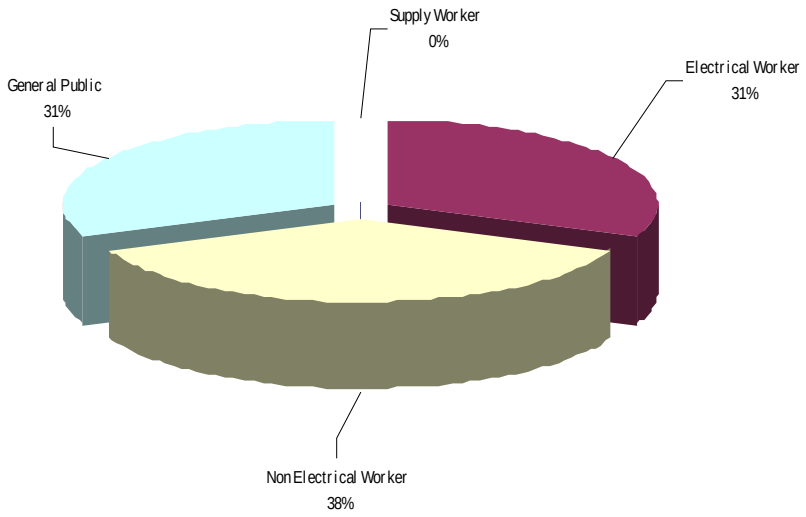
GRAPH 2.6 Deaths Involving Electricity Supply Assets over 5 years from 2001 to 2006



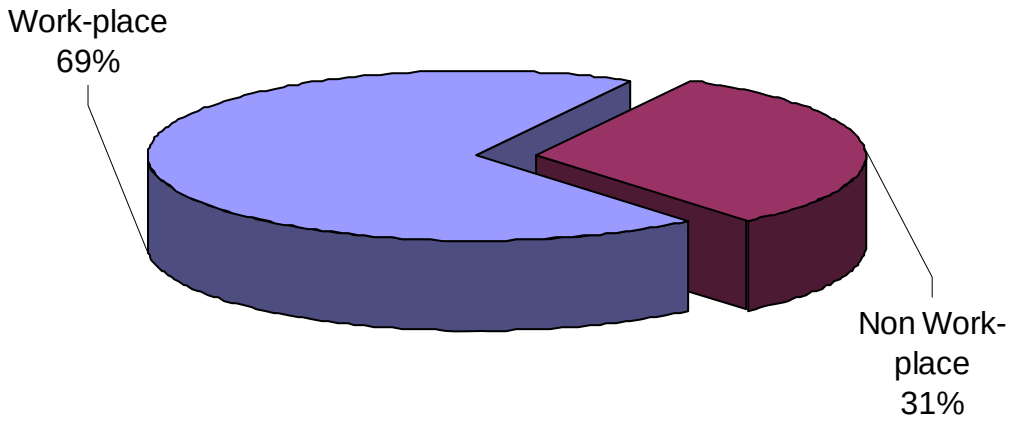
NB. **Out of 42 deaths associated with electricity supply assets over the 5 year period, 31 occurred during the course of work.**

3. Deaths involving Consumer Installation and Equipment.

GRAPH 3.1 Deaths Involving Customer's Installation, appliances or equipment sorted by Victim's Categories 2005-06

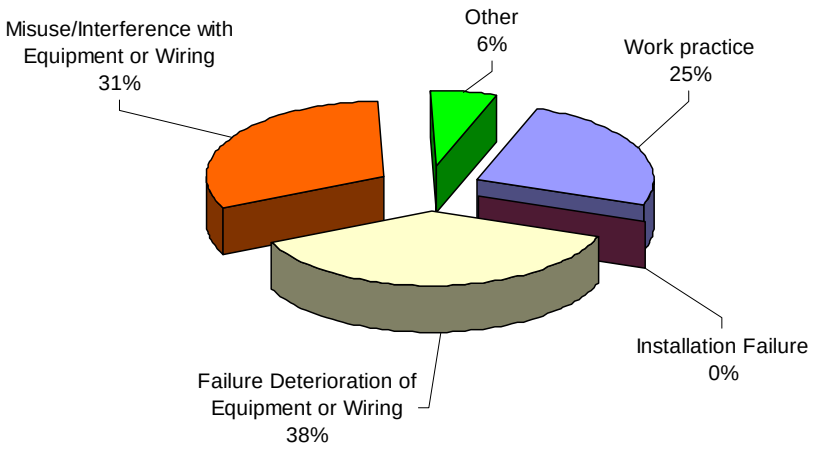


GRAPH 3.2 Deaths Involving Customer's Installation or appliances/equipment in 2004-05 sorted by locations

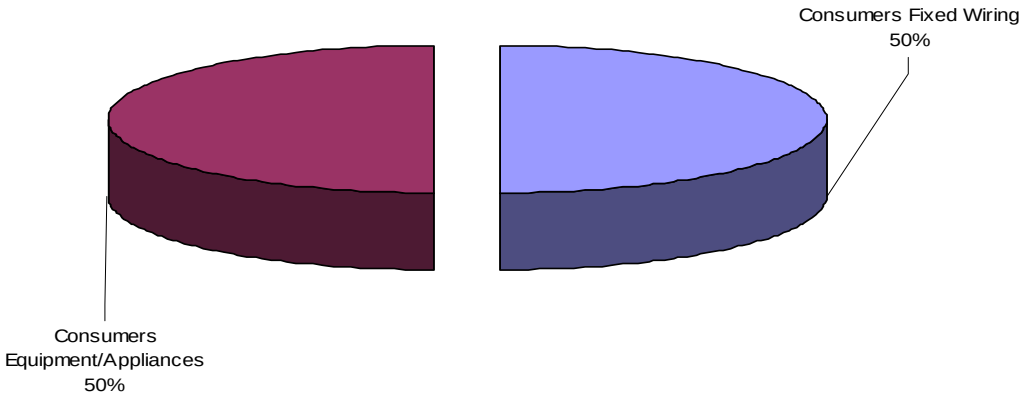


NB Out of 16 Customers Installation/Equipment related deaths in 2005-06, 11 occurred during the course of work.

GRAPH 3.3 Contributing factors for Electrical Deaths Involving Customer's Installation or appliances/equipment in 2005-06



GRAPH 3.4 Deaths Involving Customers' Installation (fixed wiring) or appliances/equipment in 2005-06



4. Fatal Electrical Accidents 2005-06

Region:	NSW	VIC	SA	WA	QLD	TAS	NT	ACT	NZ	TOTAL
Deaths:	6	6	0	3	3	0	3	0	3	24

	DEATHS		
	AUSTRALIA	NEW ZEALAND	TOTAL
TOTAL	21	3	24

YEAR	NSW	VIC	SA	WA	QLD	TAS	NT	ACT	AUST	NZ	TOTAL
2004-05	**11**	**1**	**1**	**4**	**8***	**1**	**2**	**0**	**28**	**7**	**35**
2003-04	10	1	1	3	2	0	1	0	18	2	20
2002-03	13	0	1	7	1	4	0	1	27	8	35
2001-02	3	1*	2	2	3	3	1	1	16	5	21
2000/01	9	5	7	4	10	0	2	0	37	2	39
1999-00	11	8	0	6	10	0	0	0	35	3	38
1998-99	9	7	3	5	11	0	2	0	37	11	48
1997-98	17	4	2	3	11	1	0	0	38	3	41
1996-97	9	8	2	5	20	0	2	0	46	12	58
1995-96	13	10	2	6	9	4	0	0	44	3	47
1995	13	8	2	8	7	2	1	0	41	5	46
1994	23	6	1	4	11	1	2	1	49	5	54
1993	16	5	3	6	12	3	1	3	49	6	55

Note: * Figures were changed from 7 to 8 as a result of Coroners' Findings

5. Summary of ERAC Electrical Fatality Reports 2005-06

Legend:
A *Supply Worker*
B *Electrical Worker*
C *Non Electrical Worker*
D *General Public*

ELECTRICITY DISTRIBUTOR/SUPPLY AUTHORITY EQUIPMENT

	AUSTRALIAN CAPITAL TERRITORY				NEW SOUTH WALES				NORTHERN TERRITORY				QUEENSLAND				SOUTH AUSTRALIA			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Overhead Line					**1**		**1**													
Underground Service																				
Substation/Switchyard																				
Other																				
TOTAL	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	TASMANIA				VICTORIA				WESTERN AUSTRALIA				NEW ZEALAND				TOTAL			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Overhead Line							**3**		**1**						**2**		**2**		**6**	
Underground Service																				
Substation/Switchyard																				
Other																				
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**6**	**0**

- ***A decrease of 1 in the number of deaths involving electricity distribution/supply authority equipment from 9 deaths in 2004-05 to 8 in 2005-06.***
- ***All 17 deaths involving electricity distribution/supply authority equipment over the last 2 years were due to accidental contacts with overhead conductors.***

CONSUMER INSTALLATION OR EQUIPMENT

	AUSTRALIAN CAPITAL TERRITORY		NEW SOUTH WALES		NORTHERN TERRITORY		QUEENSLAND	
	Installation	**Consumer Equipment (Appliances and Accessories)**	**Installation**	**Consumer Equipment (Appliances and Accessories)**	**Installation**	**Consumer Equipment (Appliances and Accessories)**	**Installation**	**Consumer Equipment (Appliances and Accessories)**
Work practice					**1**		**1**	
Installation Failure								
Failure Deterioration of Equipment or Wiring			**1**	**1**		**2**		
Misuse/Interference with Equipment or Wiring			**1**				**2**	
Other				**1**				
Total	**0**	**0**	**2**	**2**	**1**	**2**	**3**	**0**

	SOUTH AUSTRALIA		TASMANIA		VICTORIA		WESTERN AUSTRALIA	
	Installation	**Consumer Equipment (Appliances and Accessories)**	**Installation**	**Consumer Equipment (Appliances and Accessories)**	**Installation**	**Consumer Equipment (Appliances and Accessories)**	**Installation**	**Consumer Equipment (Appliances and Accessories)**
Work practice					**1**			**1**
Installation Failure								
Failure Deterioration of Equipment or Wiring						**2**		
Misuse/Interference with Equipment or Wiring								**1**
Other								
Total	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**2**

	NEW ZEALAND		TOTAL	
	Installation	**Consumer Equipment (Appliances and Accessories)**	**Installation**	**Consumer Equipment (Appliances and Accessories)**
Work practice			**3**	**1**
Installation Failure				**2**
Failure Deterioration of Equipment or Wiring			**1**	**3**
Misuse/Interference with Equipment or Wiring	**1**		**4**	**1**
Other				**1**
Total	**1**	**0**	**8**	**8**

A decrease of 38.6% in the number of deaths associated with customers' electrical installations, appliances or b equipment in 2005-006 compared with the 2004-05 figure.