
Electrical
Regulatory
Authorities
Council

Electrical Incident Data

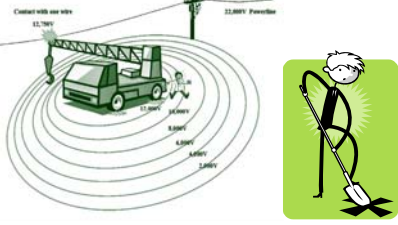

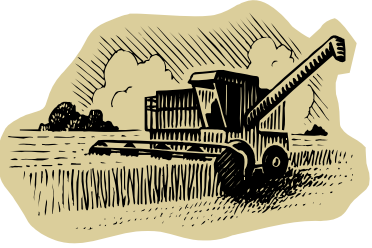
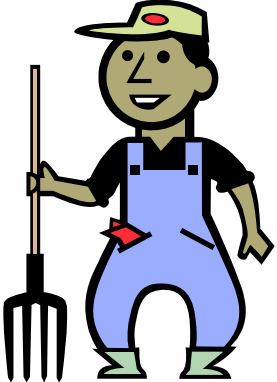
Australia & New Zealand 2007 - 08

Definitions

<i>“Customer’s Installation”</i>	means all parts of an electrical installation past the point of supply on the consumer side.
<i>“Distribution or Supply Equipment”</i>	means equipment used in the generation, transmission, supply or distribution of electricity.
<i>“Electrical Worker”</i>	means a person who carries out electrical work and is licensed or authorised to do so.
<i>“General Public”</i>	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
<i>“Misuse/Interference”</i>	means to damage, mishandle or use equipment in a way that it is not intended or for what it is designed.
<i>“Non Electrical Worker”</i>	means a person who is in the process of carrying out their occupation and is not an electrical worker.
<i>“Supply Worker”</i>	Means a person who is employed by or under the control of a network operator.
<i>“Work Practice”</i>	means the process or method by which work is carried out.

QUICK FACTS 2007-08

12 deaths were recorded in Australia and New Zealand in 2007-08. This is equivalent to 0.47 deaths per million population. Out of 12 deaths, 7 occurred in Australia. This figure is the lowest record of electrical fatalities in Australia.

	<p>Out of the total of 8 electricity network related deaths, 6 were due to accidental contact with electricity supply <u>overhead</u> conductors and 2 were due to accidental contact with electricity supply <u>underground</u> conductors</p>
	<p>4 deaths involved customer's installations, appliances or equipment</p>
	<p>Of the people who were electrocuted, 67% were either non-electrical workers or general public.</p>
	<p>Of the people who were electrocuted, 75% were workplace accidents.</p>

Electrical Incident Data

This report covers the 12 month period from 1 July 2007 to 30 June 2008. 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 12 deaths (excluding suicides) reported in the financial year, 8 deaths (67%) involved the electricity supply networks while 4 (33%) involved customers electrical installations, appliances or equipment. It is noticed that of the 12 deaths, 7 were occurred in Australia. This figure is the lowest record of electrical deaths in Australia. It is also noticed the reduction in electrical deaths were due to the significant reduction in number of deaths associated with customers installations. (a steep reduction of 16 deaths from 20 in 2006-07 to 4 in 2007-08).

As shown in table A, the number of electrical deaths has fluctuated over the past few years with a 60% decrease in this year following a 25% increase in the previous year (2006-07).

Table A: Electrical Deaths

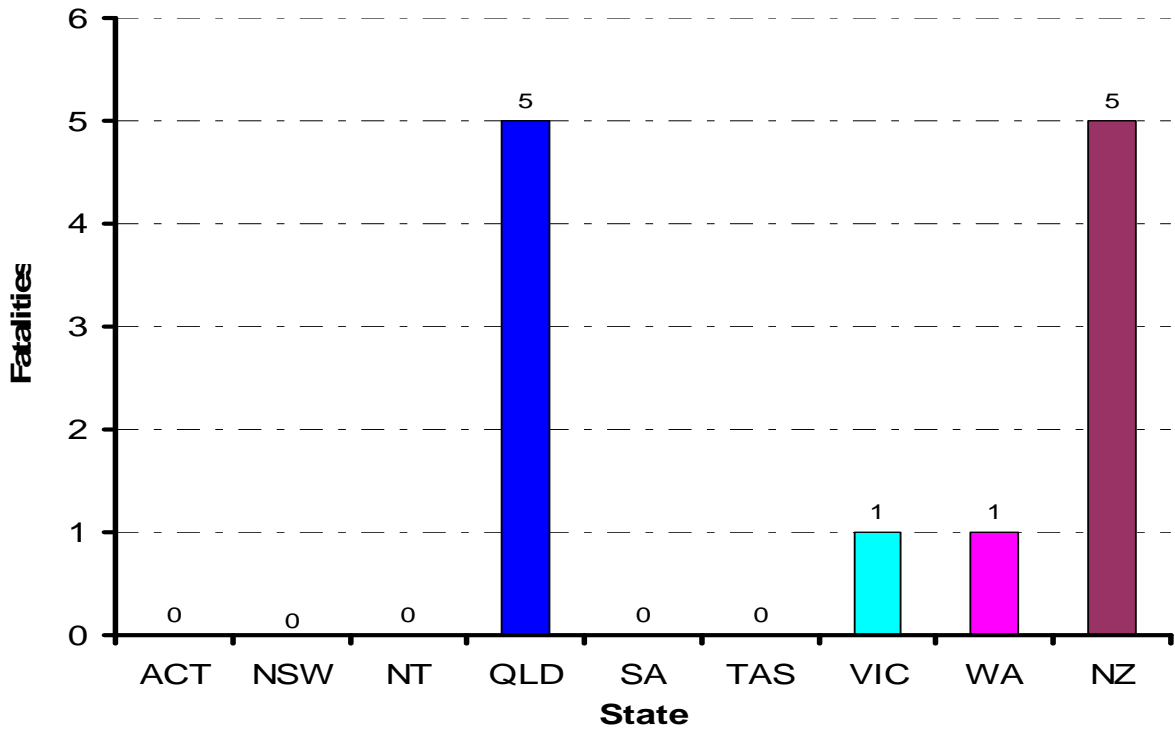
Year	Deaths	Change	%
2007-08	12	-18	↓60%
2006-07	30	6	↑25%
2005-06	24	-11	↓31%
2004-05	35	15	↑75%
2003-04	20	-15	↓43%
2002-03	35	14	↑67%
2001-02	21	-18	↓46%

The statistics from 2001-02 to 2007-08 continue to show that most electrical deaths associated with electricity networks are as a result of working on or near energised overhead conductors. 93.4% of electrical deaths associated with electricity supply networks involved overhead conductors (out of 65 deaths involving the electricity supply networks over the last 7 year period, 61 were due to contact with energised overhead conductors).

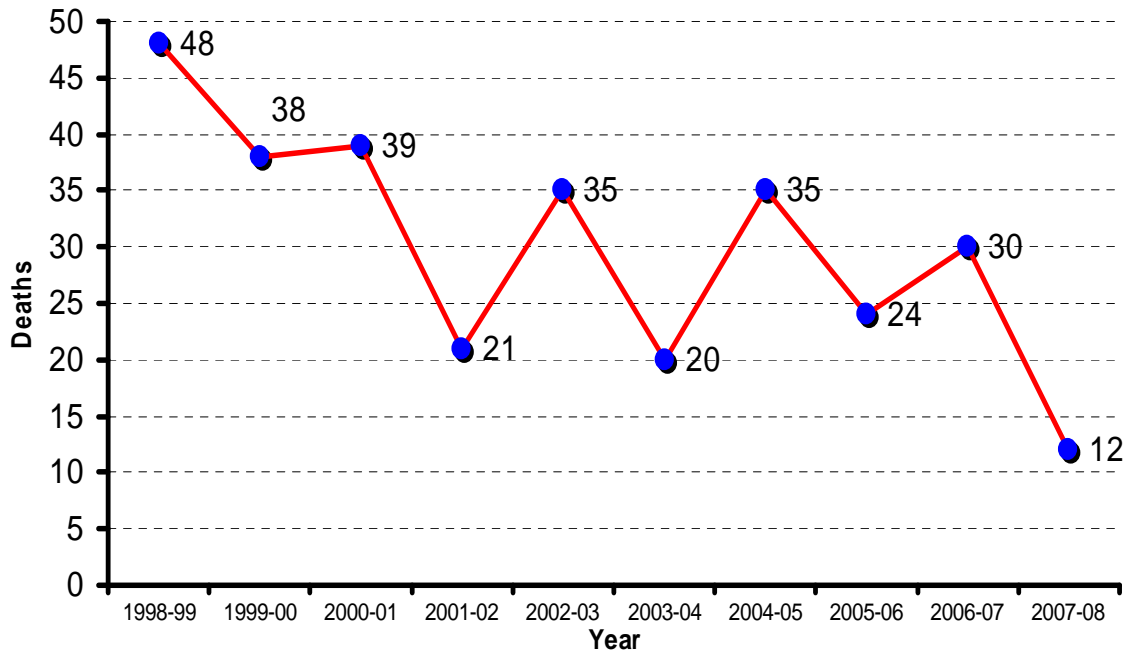
This report presents the information in a series of charts and tables.

1- Regional Deaths 2007-08

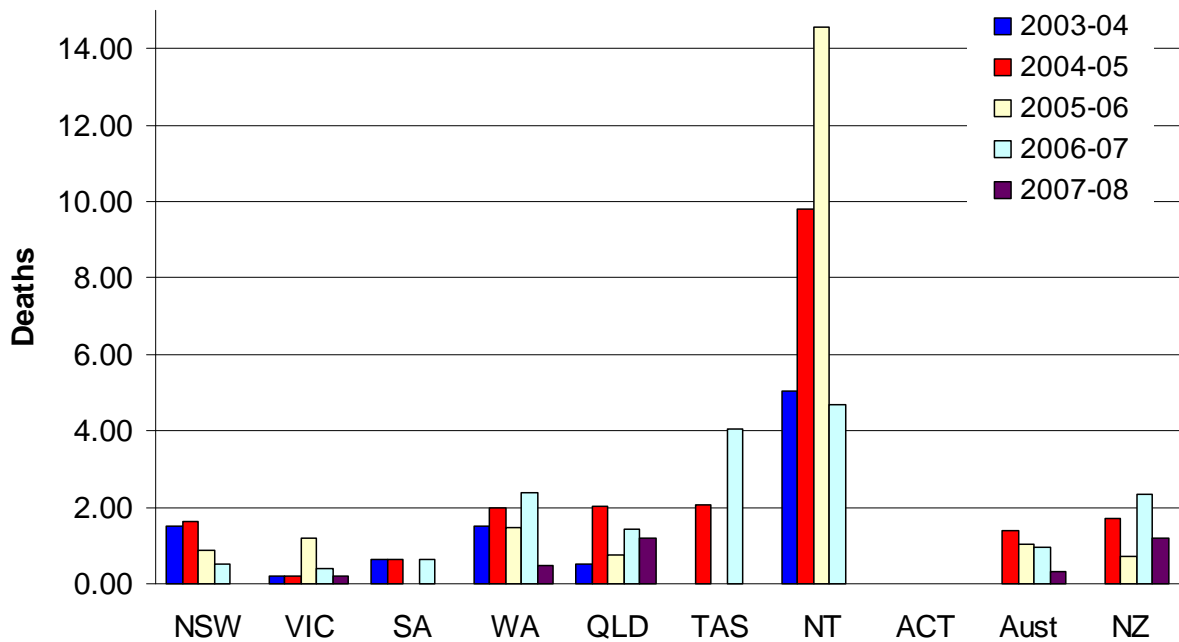
GRAPH 1.1 Australian & NZ Electrical Deaths 2007-08



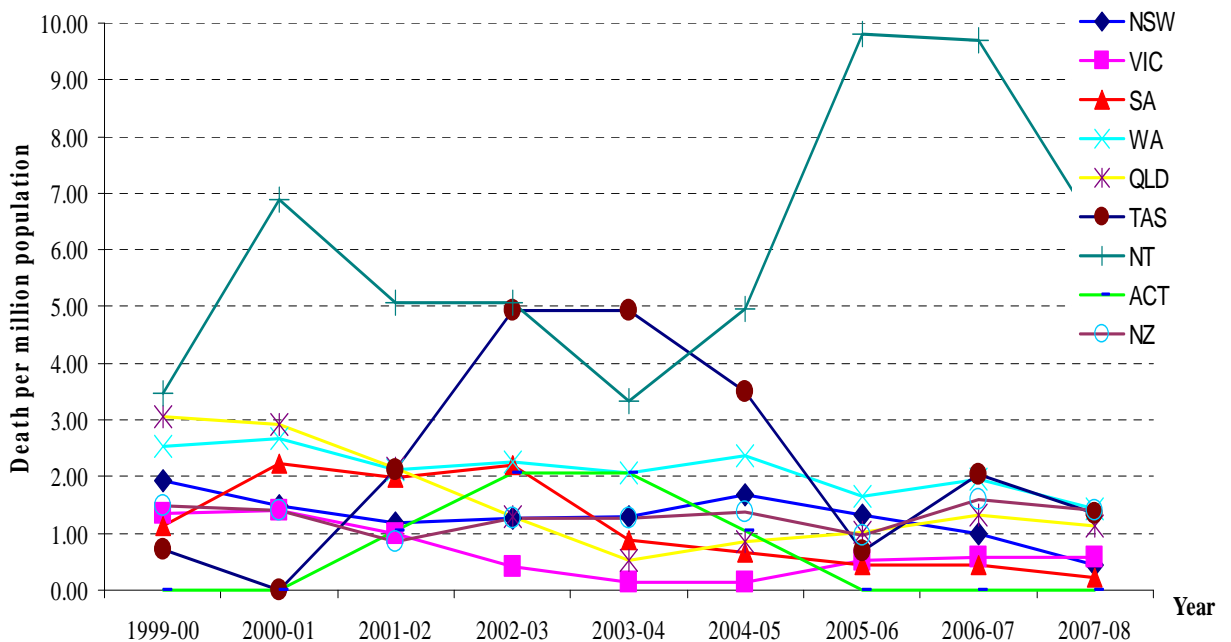
GRAPH 1.2 Number of Deaths in Australia and New Zealand 1998-2008



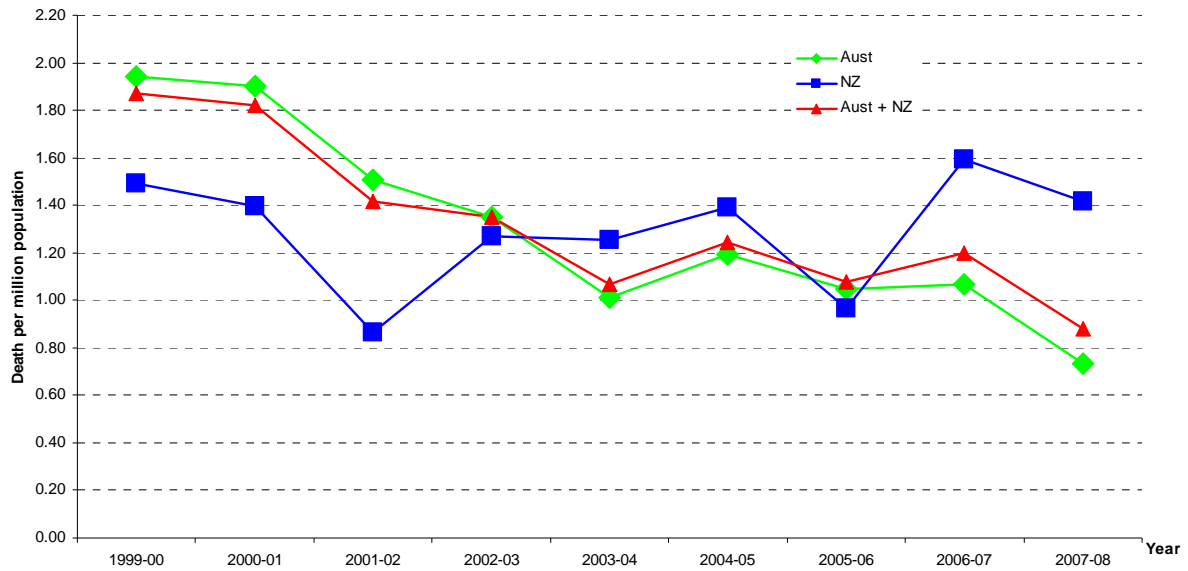
GRAPH 1.3 Electrical Deaths per Million Population from 2003 to 2008



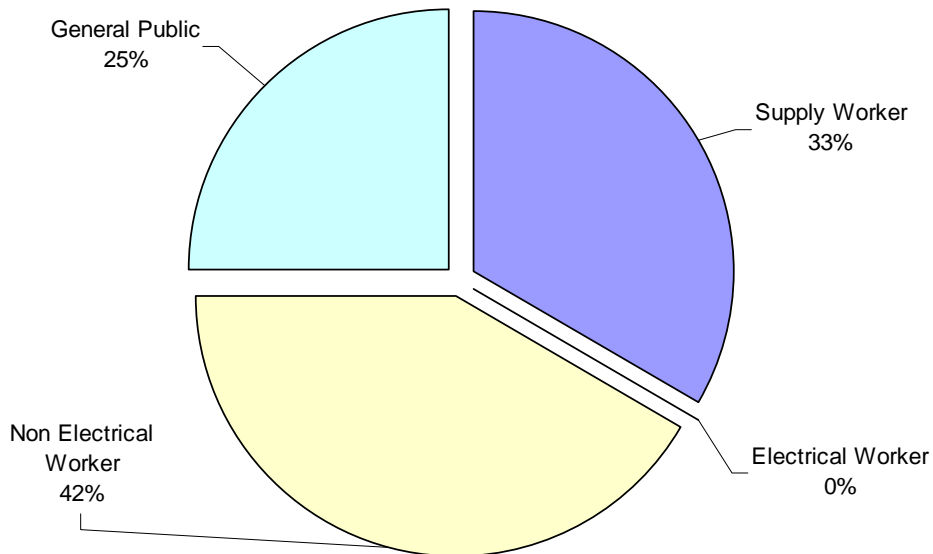
GRAPH 1.4 Trend in Electrocutions with 3 Year Moving Average per Million Population



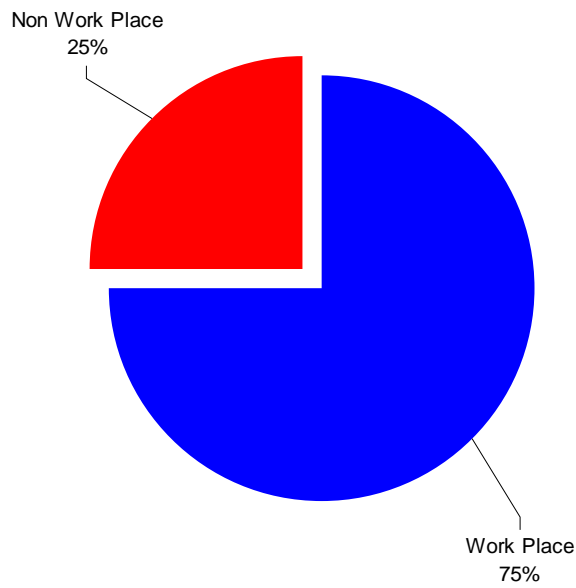
GRAPH 1.5 Trend in Electrocutions with 3 Year Moving Average per Million Population in Australia & New Zealand



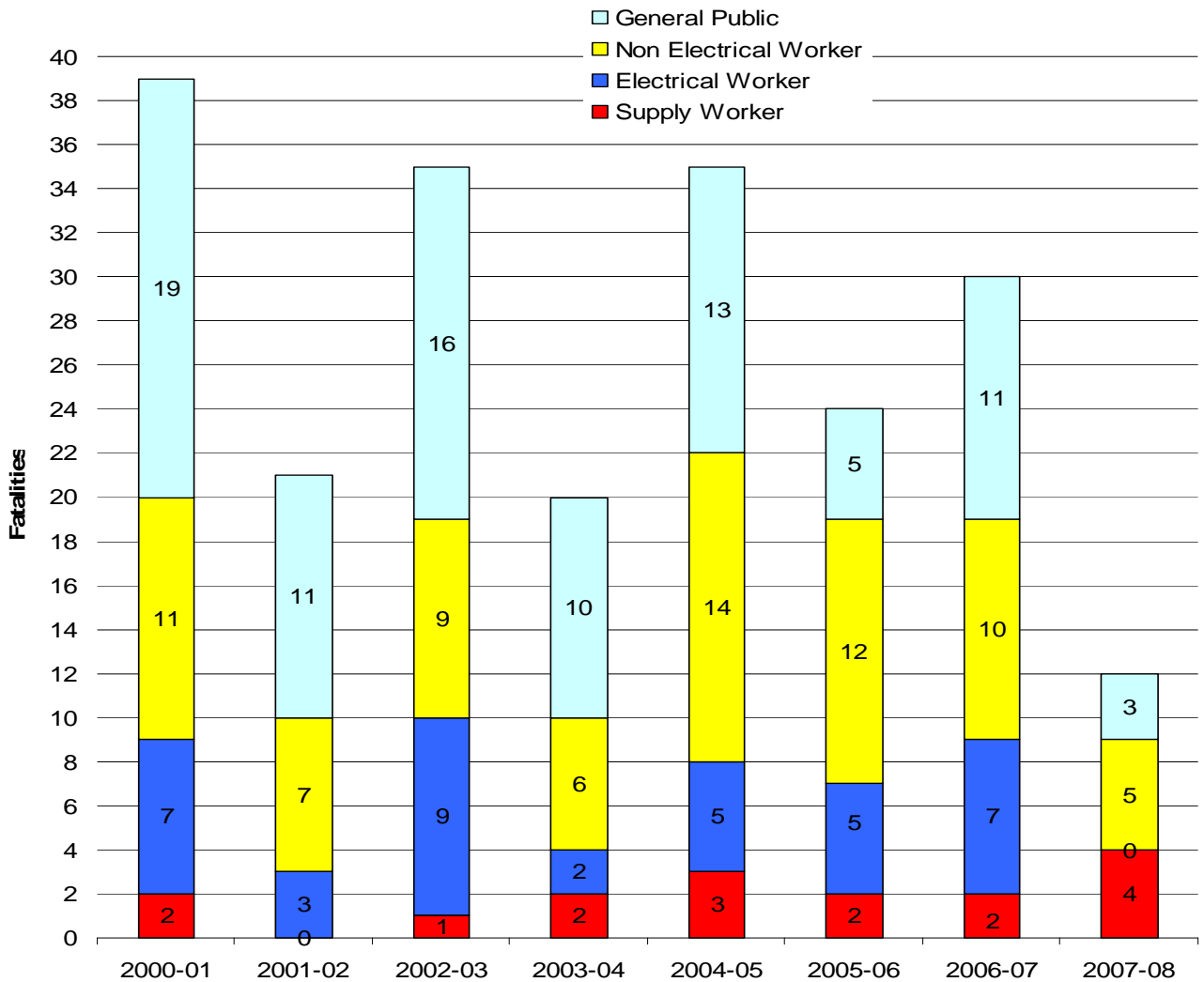
GRAPH 1.6 Aust & NZ Deaths Categories 2007-08



GRAPH 1.7 Deaths: Work Place versus None—Work Place 2007-08

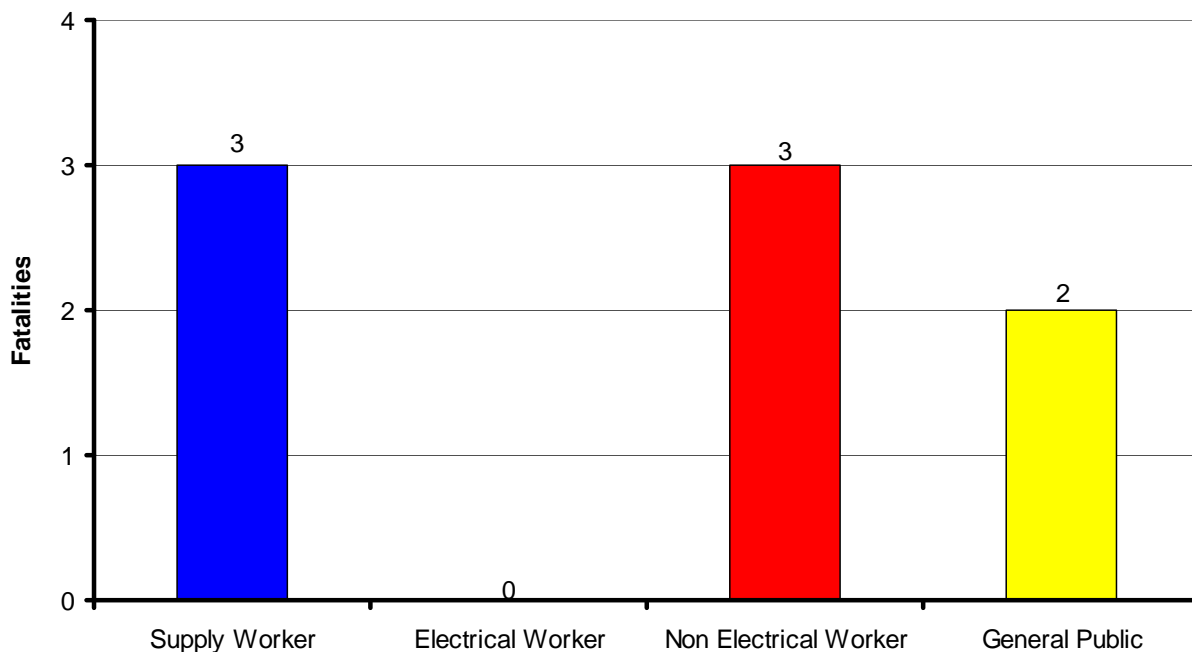


GRAPH 1.8 Deaths sorted by Victim Categories 2000 – 2008

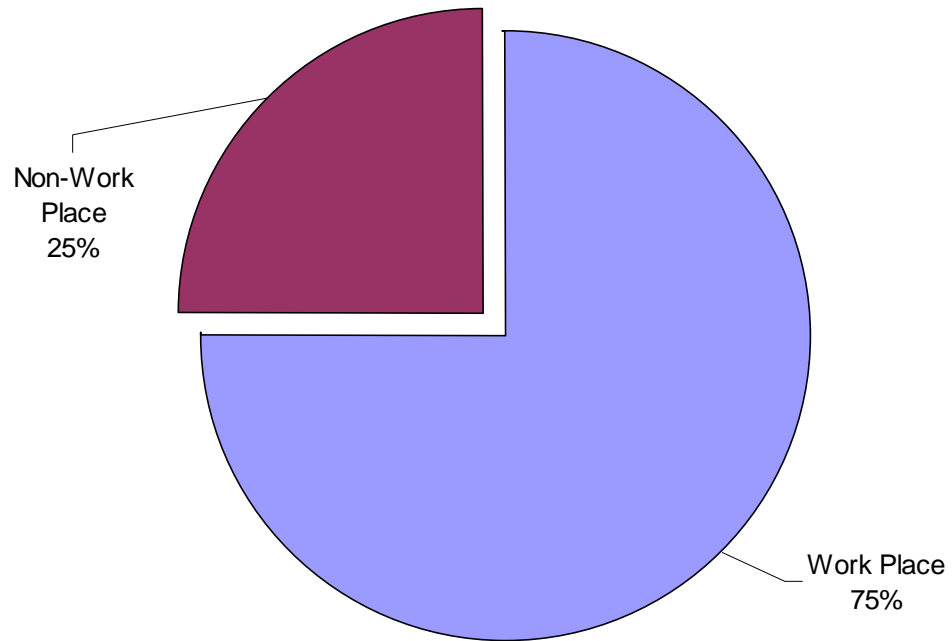


2-Deaths involving Network Assets

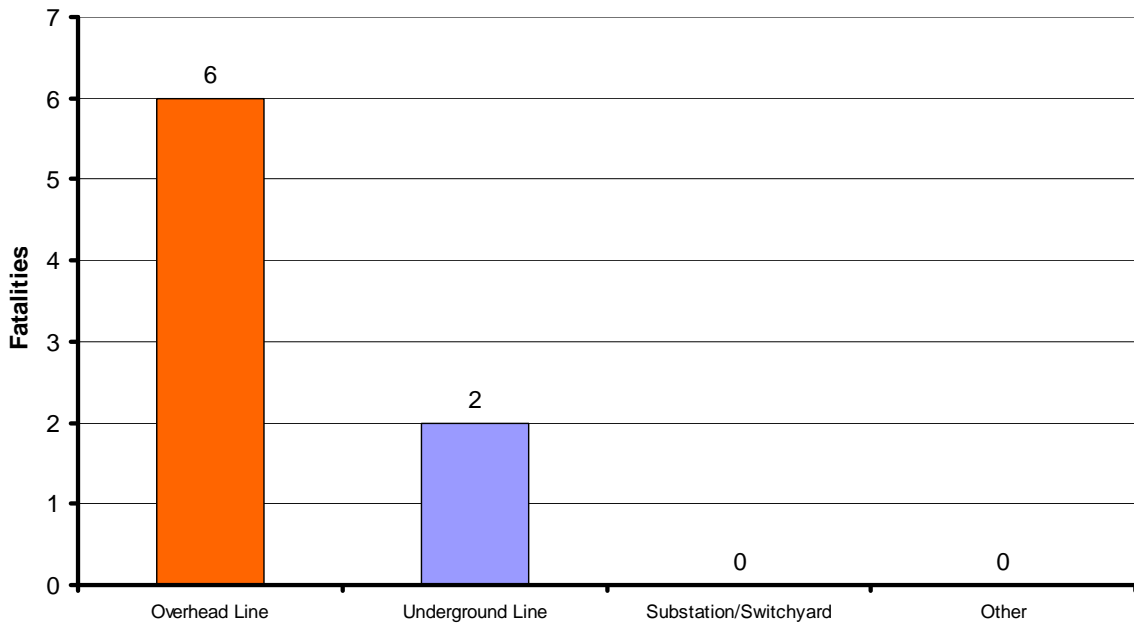
GRAPH 2.1 Deaths Involving Electricity Supply Assets 2007-08 sorted by victim category



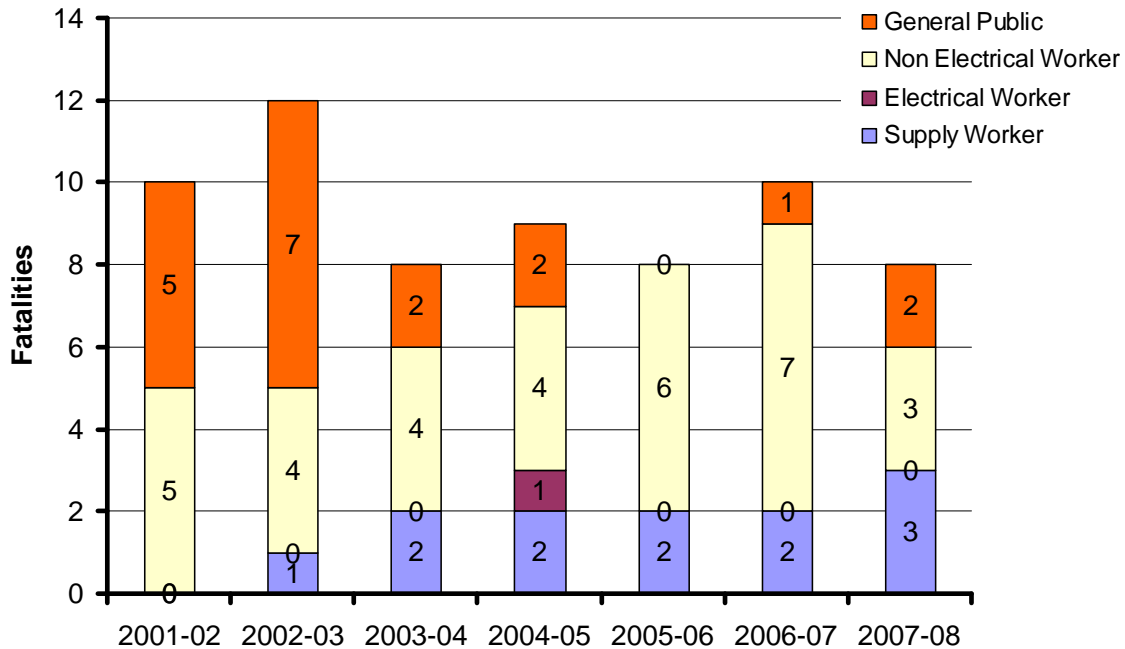
GRAPH 2.2 Death involving Electricity Supply Assets: Work Place versus Non-work Place 2007-08



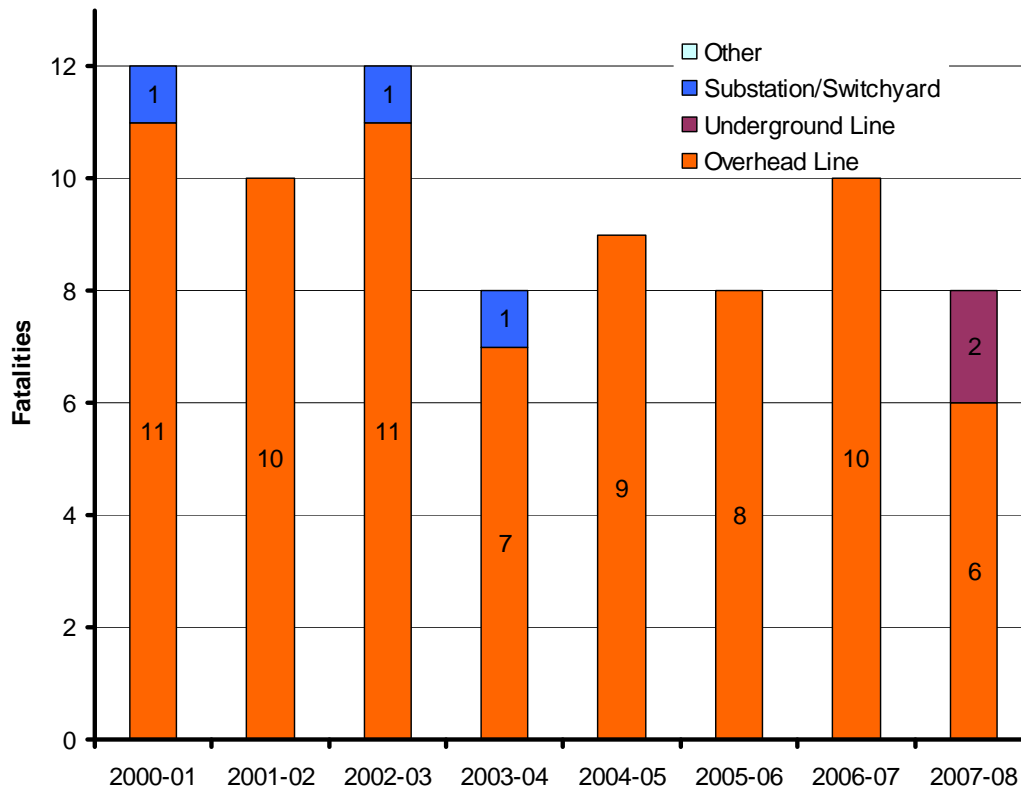
GRAPH 2.3 Deaths Involving Electricity Supply Assets 2007-08 sorted by Asset Types



GRAPH 2.4 Deaths Involving Electricity Supply Assets from 2001 to 2008 Sorted by Victim's Categories

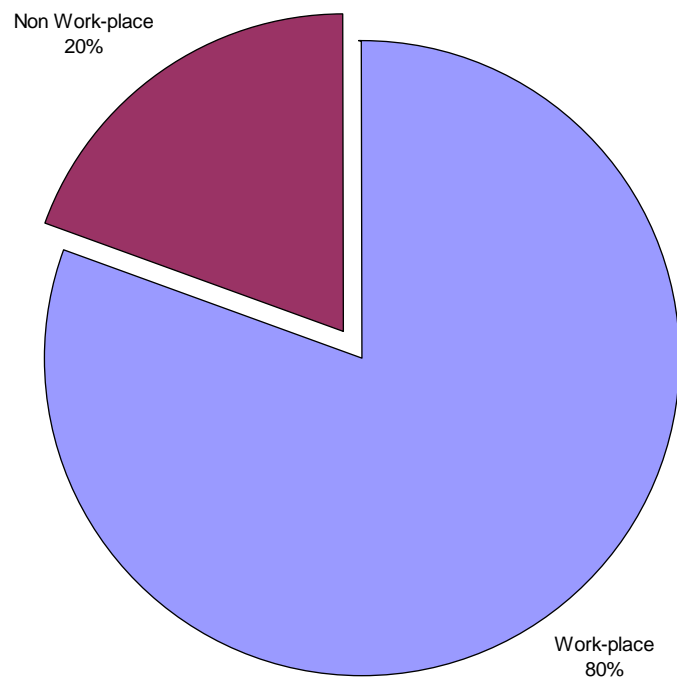


GRAPH 2.5 Deaths Involving Electricity Supply Assets from 2000 to 2008 Sorted by Asset Types



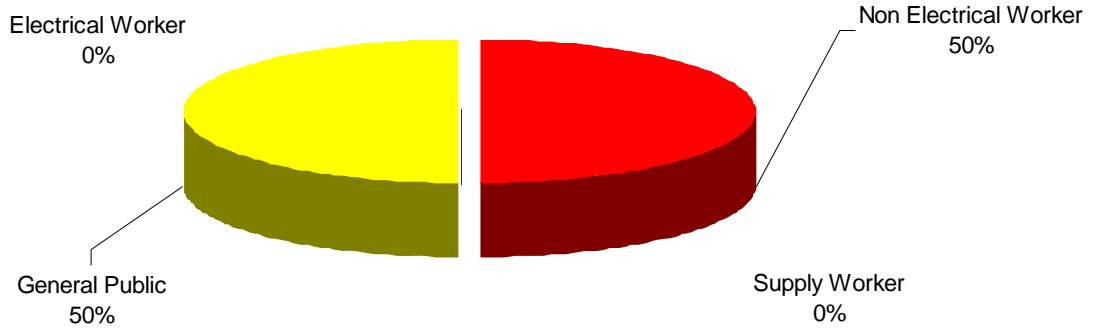
NB. 93.5% of deaths associated with Network Assets over 8 years from 2000 to 2008 involved overhead conductors, 3.9% involved equipment in a substation and 2.6% involved underground cables.

GRAPH 2.6 Deaths Involving Electricity Supply Assets from 2000 to 2008

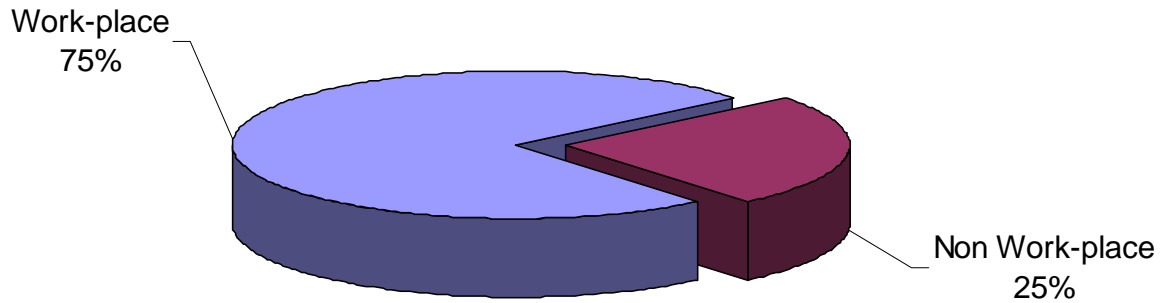


3. Deaths involving Consumer Installation and Equipment.

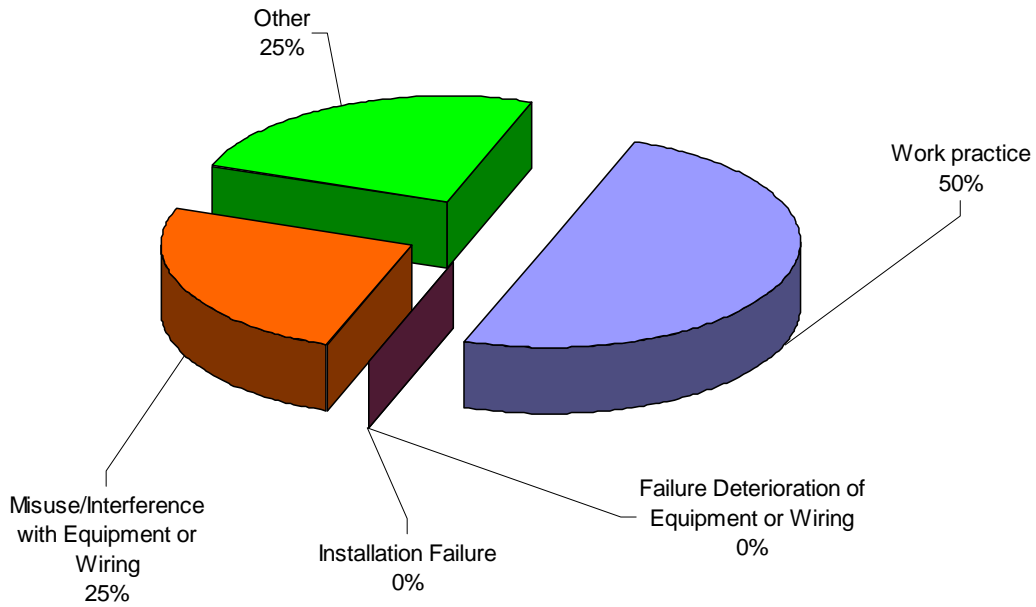
GRAPH 3.1 Deaths Involving Customer's Installation, appliances or equipment sorted by Victim's Categories 2007-08



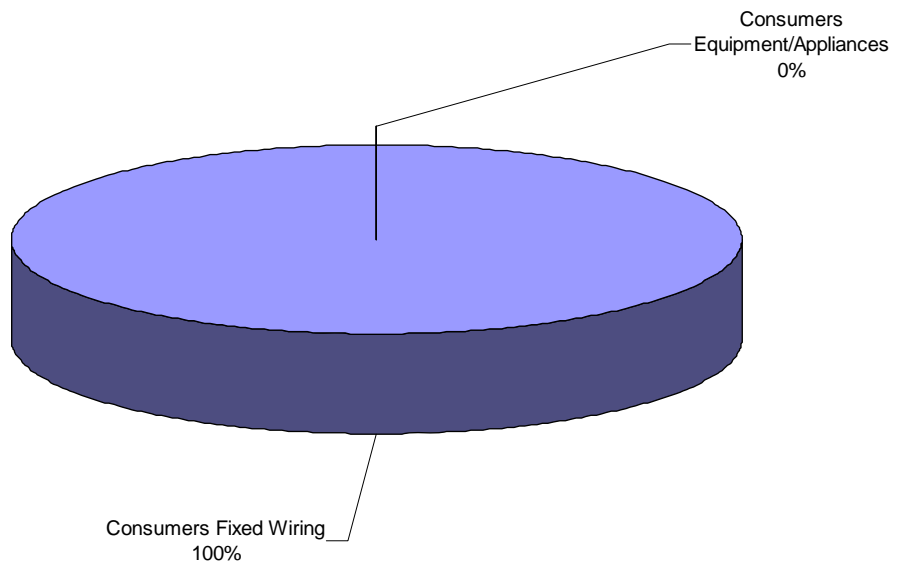
GRAPH 3.2 Deaths Involving Customer's Installation or appliances/equipment in 2007-08 sorted by locations



GRAPH 3.3 Contributing factors for Electrical Deaths Involving Customer's Installation or appliances/equipment in 2007-08



GRAPH 3.4 Deaths Involving Customers' Installation (fixed wiring) or appliances/equipment in 2007-08



4. Fatal Electrical Accidents 2007-08

Region:	NSW	VIC	SA	WA	QLD	TAS	NT	ACT	NZ	TOTAL
Deaths:	0	1	0	1	5	0	0	0	5	12

	AUSTRALIA	DEATHS NEW ZEALAND	TOTAL
TOTAL	7	5	12

YEAR	NSW	VIC	SA	WA	QLD	TAS	NT	ACT	AUST	NZ	TOTAL
2006-07	3	2	1	5	6	2	1	0	20	10	30
2005-06	6	6	0	3	3	0	3	0	21	3	24
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 previous reports.

5. Summary of ERAC Electrical Fatality Reports 2007-08

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															2					
Underground Service																				
Substation/Switchyard																				
Other																				
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	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					1							1	1		1	1	2		3	1
Underground Service													1				1			1
Substation/Switchyard																				
Other																				
TOTAL	0	0	0	0	1	0	0	0	0	0	0	1	2	0	1	1	3	0	3	2

- *A decrease of 2 in the number of deaths involving electricity supply authority equipment from 10 deaths in 2006-07 to 8 in 2007-08.*

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							2	
Installation Failure								
Failure Deterioration of Equipment or Wiring								
Misuse/Interference with Equipment or Wiring								
Other							1	
Total	0	0	0	0	0	0	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								
Installation Failure								
Failure Deterioration of Equipment or Wiring								
Misuse/Interference with Equipment or Wiring								
Other								
Total	0	0	0	0	0	0	0	0

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

A decrease of 80% in the number of deaths associated with customers' electrical installations, appliances or equipment in 2007-08 (4 deaths) compared with the 2006-07 figure (20 deaths).