
Electrical
Regulatory
Authorities
Council

Electrical Incident Data

Australia & New Zealand 2002 - 03

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Definitions

<i>“Supply Industry Worker”</i>	Means a person who is employed by a network operator.
<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>“Electrical Worker”</i>	means a person who carries out electrical work and is licensed or authorised to do so.
<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>“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>“Work Practice”</i>	means the process or method by which work is carried out.
<i>“Consumer 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>“Minor Electrical Incident”</i>	is an electrical incident involving electricity in which a person – makes accidental contact with any live high voltage electric line or live electrical equipment operated at high voltage; or receives an electric shock as a result of direct or indirect contact with any network assets or an electrical installation
<i>“Serious Electrical Incident”</i>	is an incident involving electricity which causes or has the potential to cause-- (a) the death of or injury to a person; or (b) significant damage to property; or (c) a serious risk to public safety

Electrical Incident Data

This report covers the 12 month period from 1 July 2002 to 30 June 2003. It is based on details of incidents reported to electrical safety regulators in Australia and New Zealand.

It is important to realise that not all electrical safety regulators in Australia and New Zealand have legislative power to require all minor and serious electrical incidents to be reported. When such requirements are introduced or increased by any regulator (such as was the case in Victoria in 1999) then the number of incidents recorded will show a sudden increase. For these reasons the statistical data on minor and serious incidents is included in this report for information only and should not be used for any comparison purpose. However, the information may be used for promoting public awareness of electrical safety risks to reduce electrical incidents.

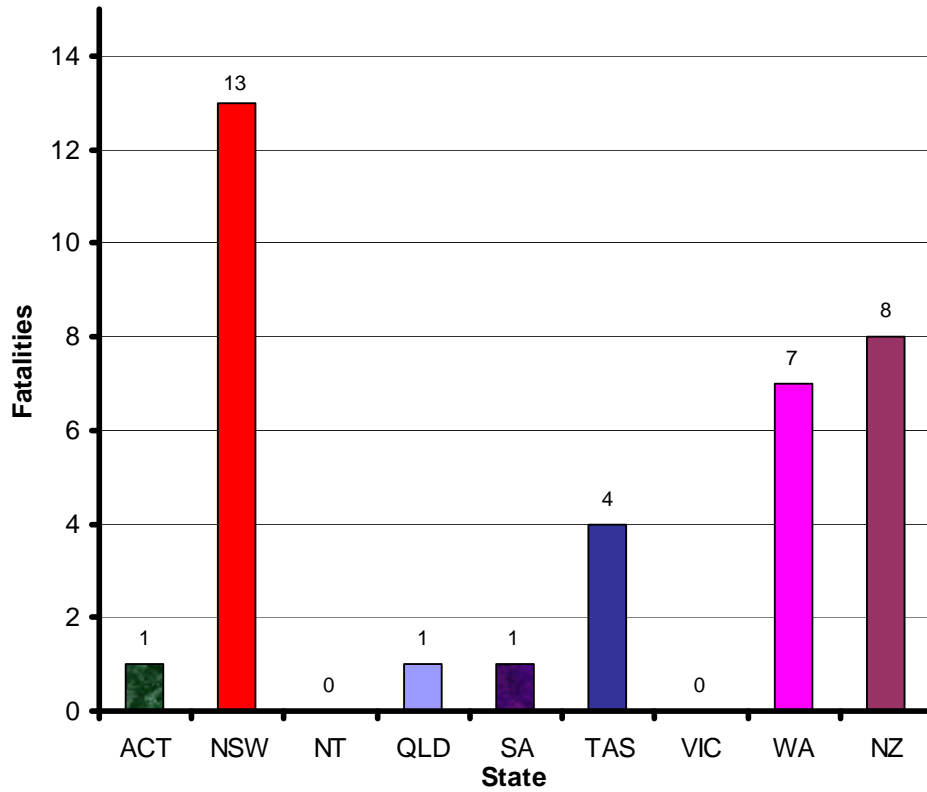
A total of 3541 electrical incidents were reported: 35 resulted in death; 356 were considered to be serious and 3150 were minor. Out of 35 fatalities, 12 were involving the electricity supply networks and 23 were involving consumers installations or equipment.

The statistics from 2000-01 to 2002-03 indicate that 94.1% of electrical fatalities associated with electricity supply networks involved overhead conductors (Out of 34 fatalities involving the electricity supply networks over the last three years, 32 were due to contact with overhead conductors).

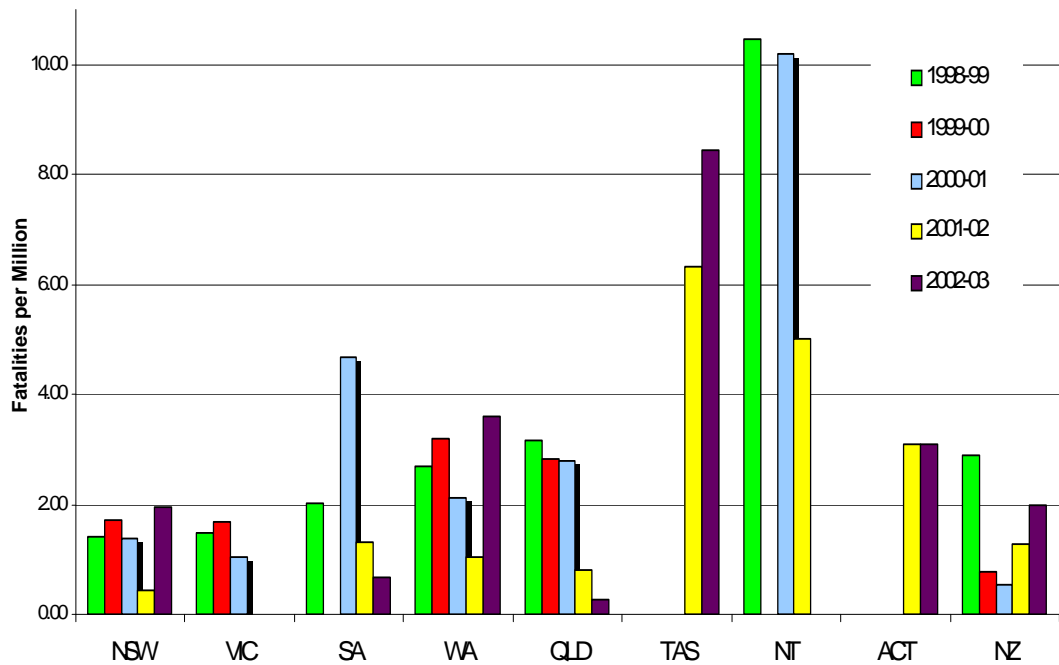
This report presents the information in a series of charts and tables.

1. Regional Fatalities 2002-03

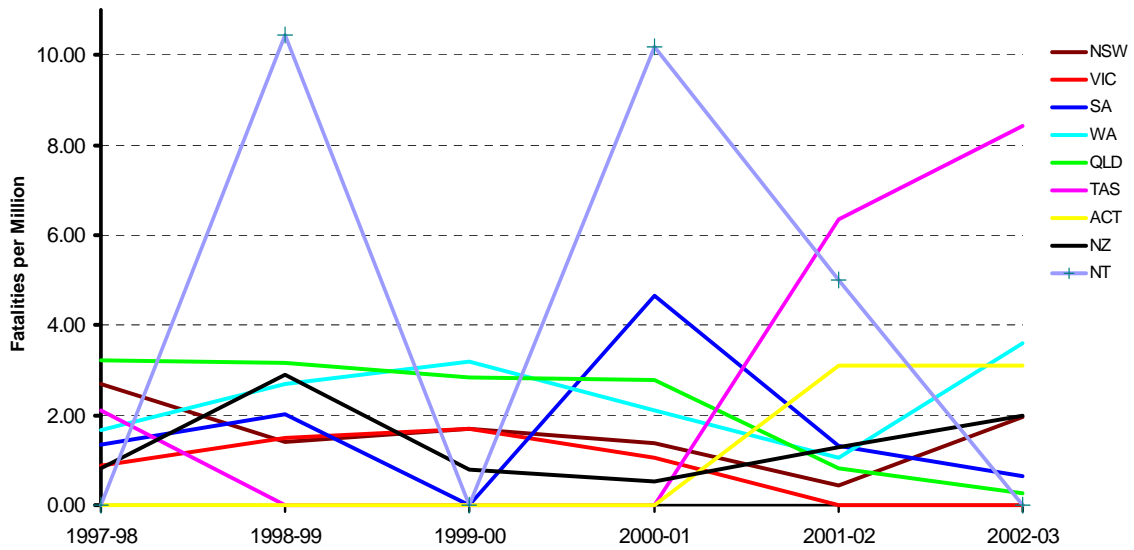
GRAPH 1.1 Australian & NZ Electrical Fatalities 2002-03



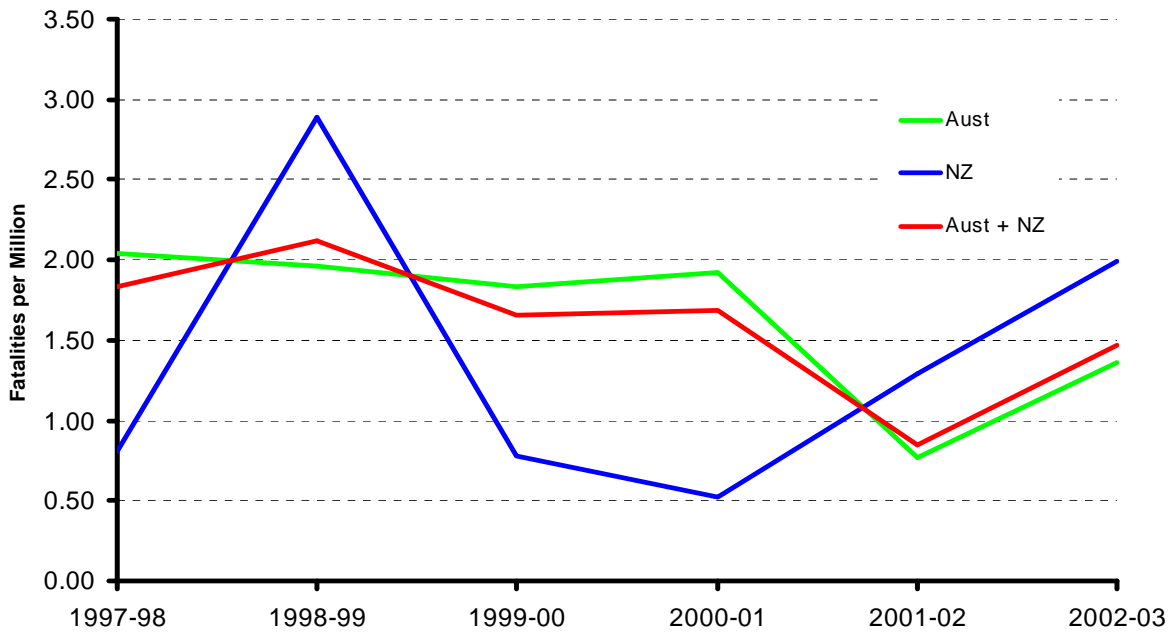
GRAPH 1.2 Electrical Fatalities per Million Persons 2002-03



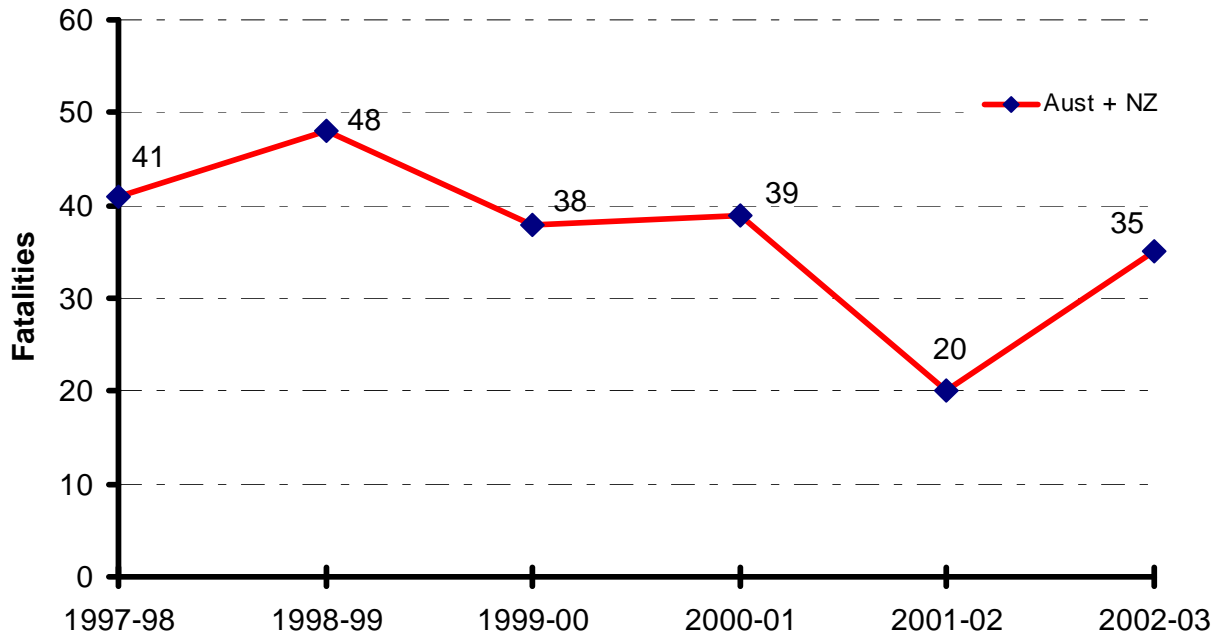
GRAPH 1.3 Regional Trend per Million Persons



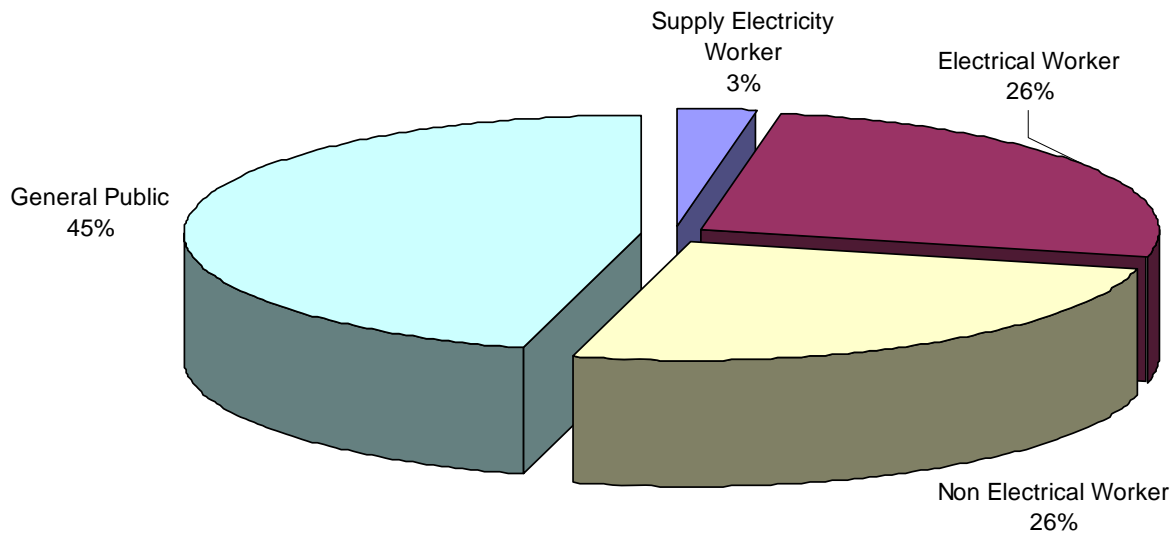
GRAPH 1.4 Trend per Million Australians and New Zealanders



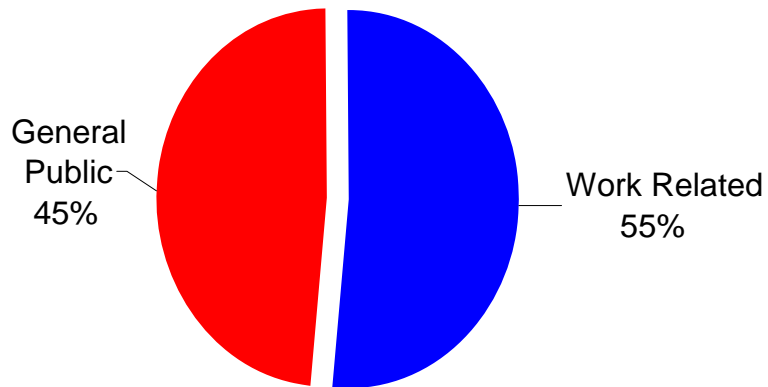
GRAPH 1.5 Total Number of Fatalities in Aust + NZ



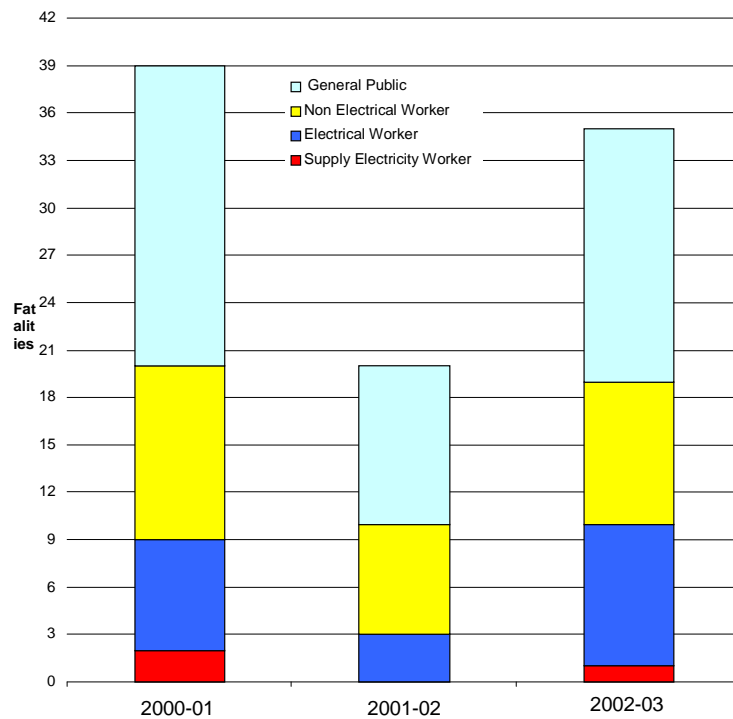
GRAPH 1.6 Aust & NZ Fatalities Victim Categories 2002-03



GRAPH 1.7 Electrical Fatalities Work Related Versus General Public

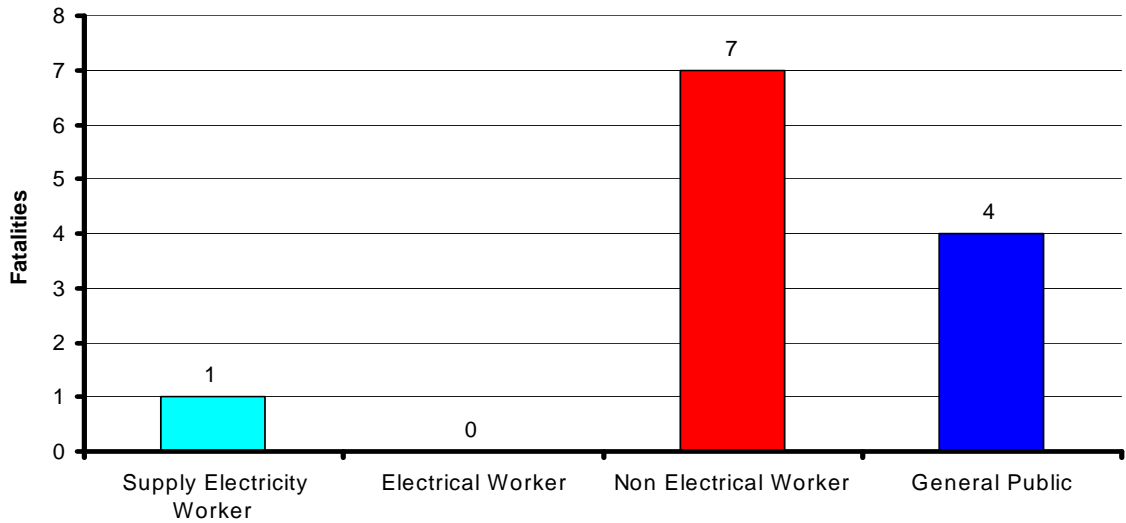


GRAPH 1.8 Electrical Fatalities Victim Categories

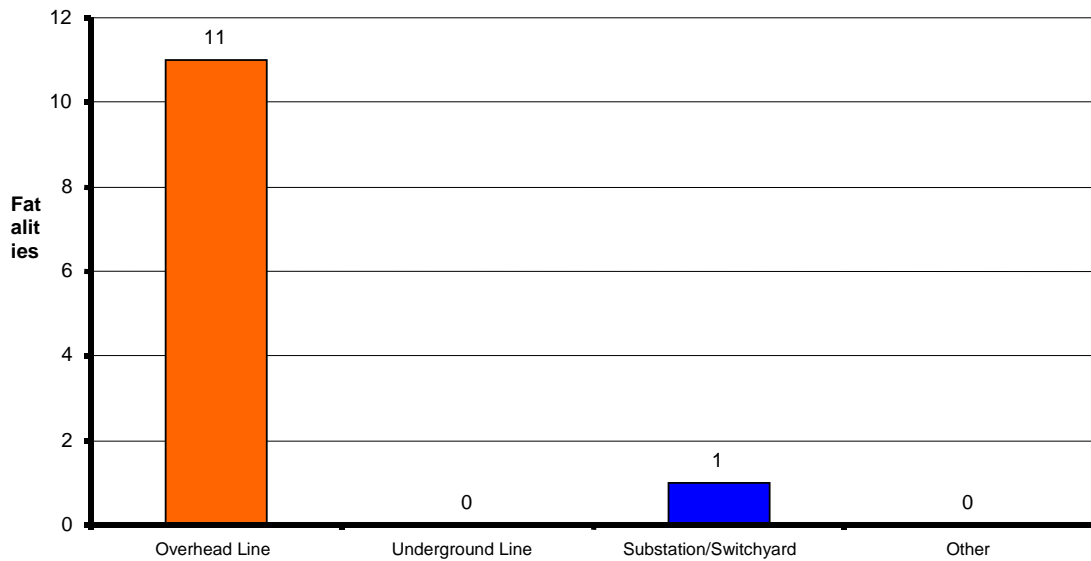


2. Fatalities Involving Network Assets

GRAPH 2.1 Fatalities Involving Electricity Supply Assets 2002-03 Sorted by Victim's Category

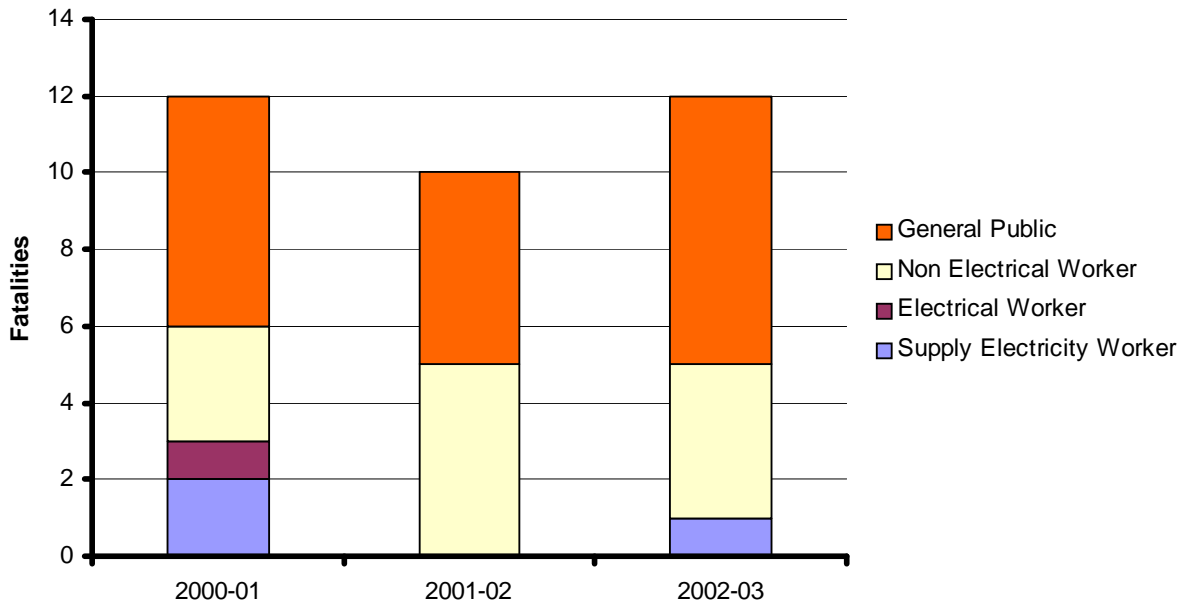


GRAPH 2.2 Fatalities Involving Electricity Supply Assets 2002-03 Sorted by Asset Types

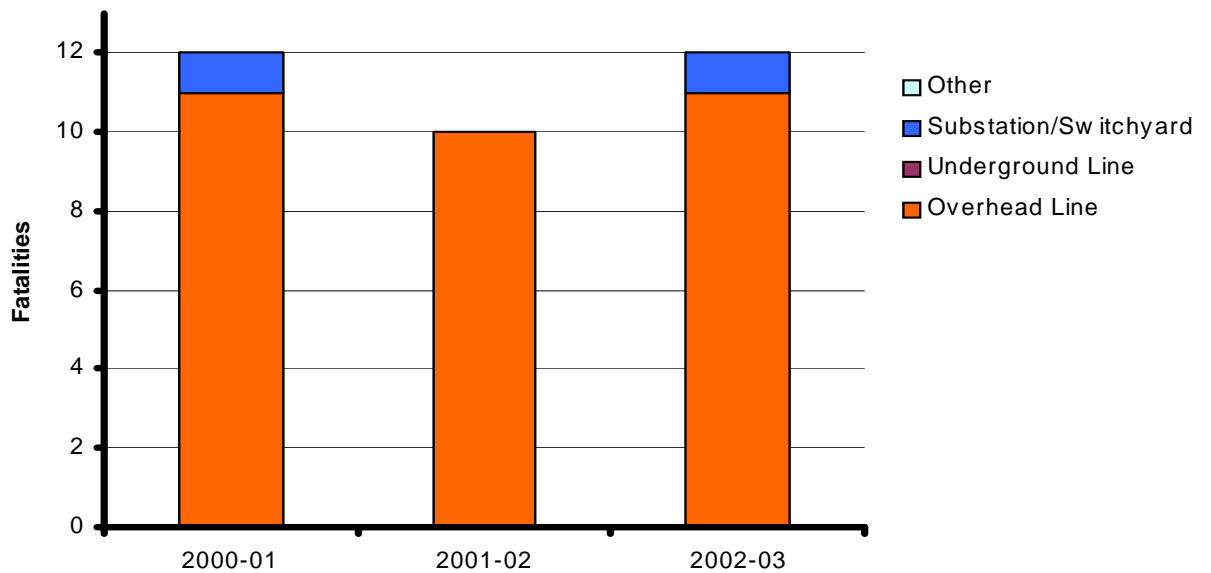


NB. 91.7% of fatalities associated with Network Assets in 2002-03 involved overhead conductors.

GRAPH 2.3 Fatalities Involving Electricity Supply Assets from 2002 to 2003 Sorted by Victim's Categories



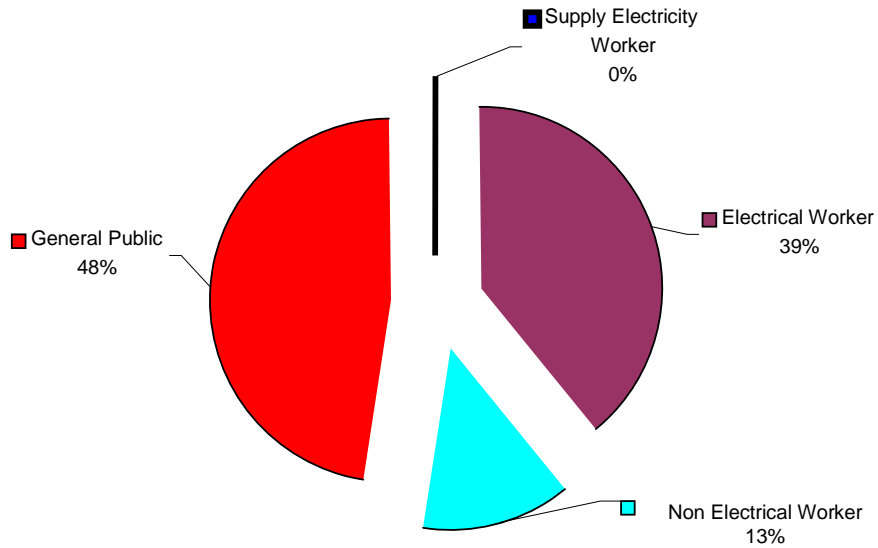
GRAPH 2.4 Fatalities Involving Electricity Supply Assets from 2002 to 2003 Sorted by Asset Types



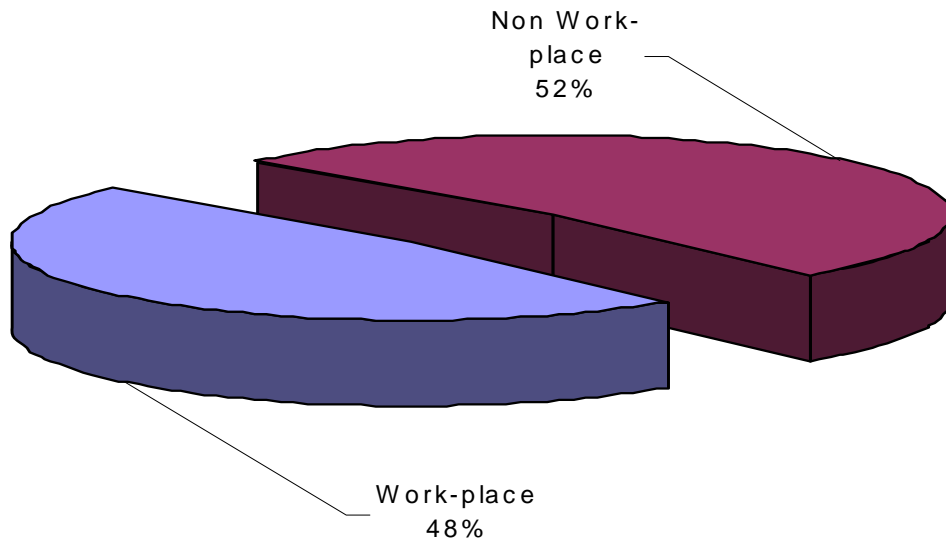
NB. 94.1% of fatalities associated with Network Assets over 3 years from 2000 to 2003 involved overhead conductors.

3. Fatalities involving Consumer Installation and Equipment.

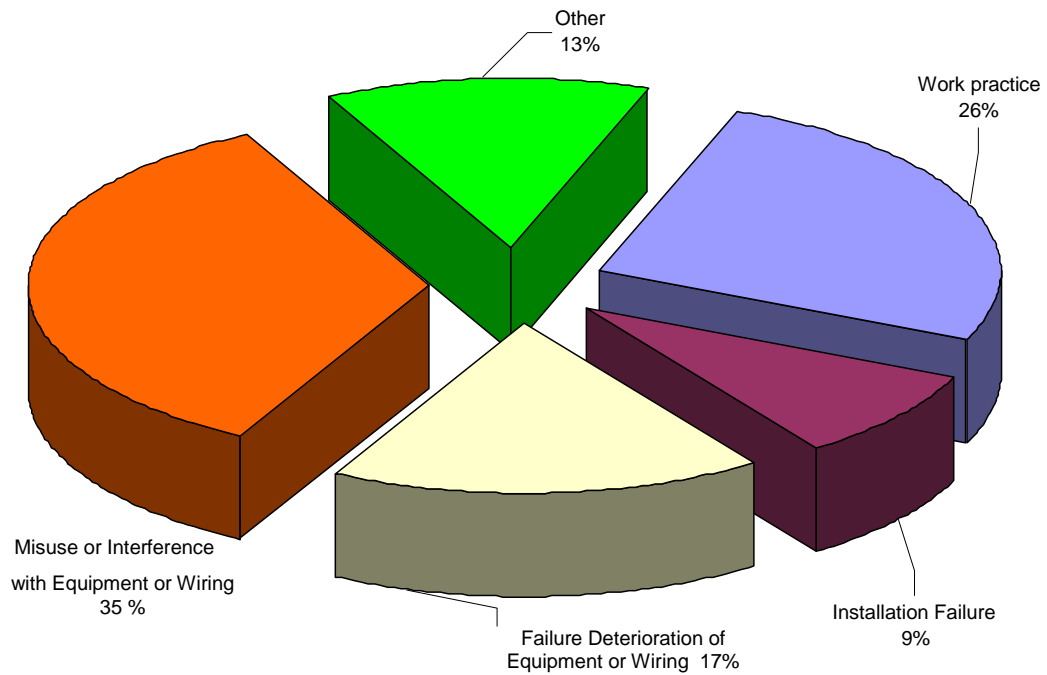
GRAPH 3.1 Electrical Fatalities Involving Consumer's Installation or equipment sorted by Victim's Categories 2002-03



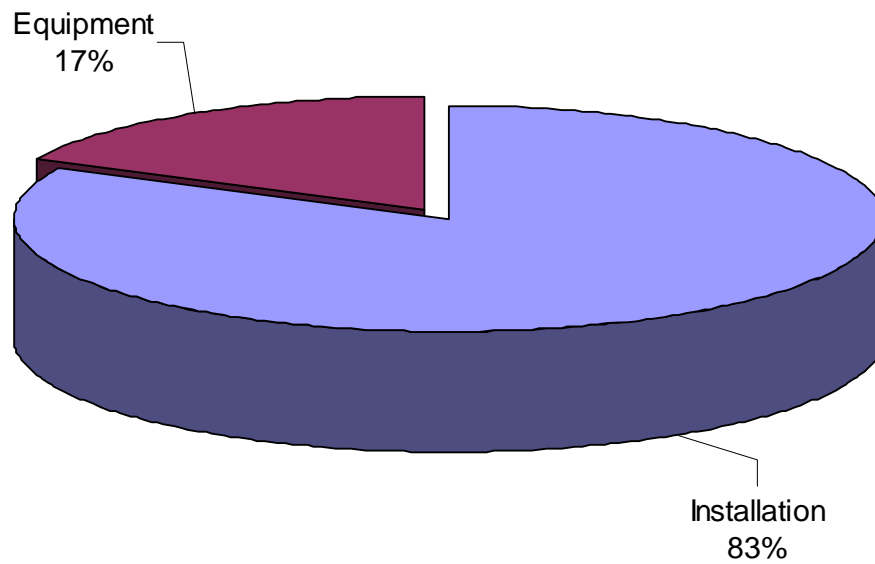
GRAPH 3.2 Electrical Fatalities Involving Consumer's Installation or equipment at work place in 2002-03



GRAPH 3.3 Circumstances of Electrical Fatalities Involving Consumer's Installation or equipment in 2002-03



GRAPH 3.4 Electrical Fatalities Involving Consumer's Installation or equipment in 2002-03



4. Fatal Electrical Accidents 2002-03

Region:	NSW	VIC	SA	WA	QLD	TAS	NT	ACT	NZ	TOTAL
Fatalities:	13	0	1	7	1	4	0	1	8	35

FATALITIES		
	AUSTRALIA	NEW ZEALAND
TOTAL	27	8
	TOTAL	
		35

YEAR	NSW	VIC	SA	WA	QLD	TAS	NT	ACT	AUST	NZ	TOTAL
2002-03	13	0	1	7	1	4	0	1	27	8	35
2001-02	3	0	2	2	3	3	1	1	15	5	20
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
1992	19	7	7	5	12	1	1	0	52	7	59

5. Summary of ERAC Electrical Fatality Reports 2002-03

Legend:

A Supply Electricity 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							3	1												
Underground Service																				
Substation/Switchyard																				
Other																				
TOTAL	0	0	0	0	0	0	3	1	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			1								1	2			2	1			7	4
Underground Service																				
Substation/Switchyard													1				1			
Other																				
TOTAL	0	0	1	0	0	0	0	0	0	0	1	2	1	0	2	1	1		7	4

Of 35 electrical fatalities in Australia and New Zealand in 2002--03, 34.3% (12 deaths) were involving electricity distribution/supply authority equipment

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			3					
Installation Failure			2					
Failure Deterioration of Equipment or Wiring			2					
Misuse/Interference with Equipment or Wiring	1			1				1
Other			1					
Total	1	0	8	1	0	0	0	1

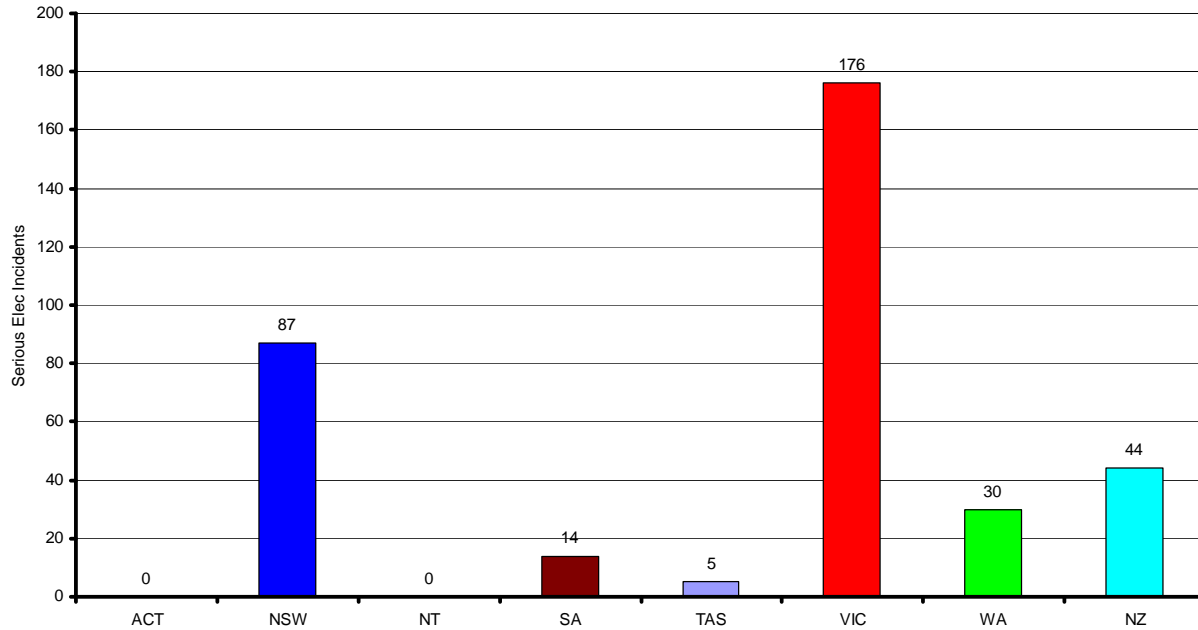
	SOUTH AUSTRALIA		TASMANIA		VICTORIA		WESTERN AUSTRALIA	
	Installation	Consumer Equipment (Appliances and Accessories)	Installation	Consumer Equipment (Appliances and Accessories)	Installation	Consumer Equipment (Appliances and Accessories)	Installation	Consumer Equipment (Appliances and Accessories)
Work practice	1						1	
Installation Failure								
Failure Deterioration of Equipment or Wiring								2
Misuse/Interference with Equipment or Wiring			2				1	
Other			1					
Total	0	0	3	0	0	0	2	2

	NEW ZEALAND		TOTAL	
	Installation	Consumer Equipment (Appliances and Accessories)	Installation	Consumer Equipment (Appliances and Accessories)
Work practice	1		6	0
Installation Failure			2	0
Failure Deterioration of Equipment or Wiring			2	2
Misuse/Interference with Equipment or Wiring	2		6	2
Other	1		3	0
Total	4	0	19	4

Of 35 electrical fatalities in Australia and New Zealand in 2002-03, 65.7% (23 deaths) were involving consumer's electrical installations or equipment.

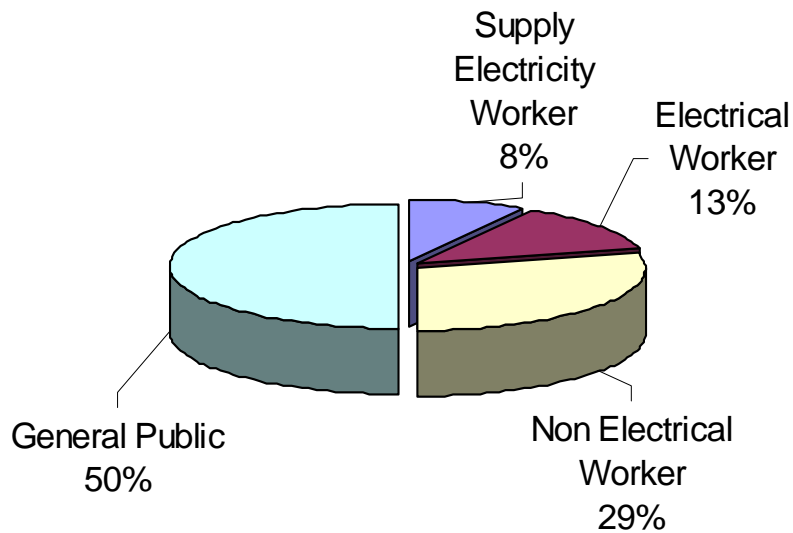
6. Serious Electrical Incidents

GRAPH 6.1 Australian and New Zealand Serious Incidents 2002-03

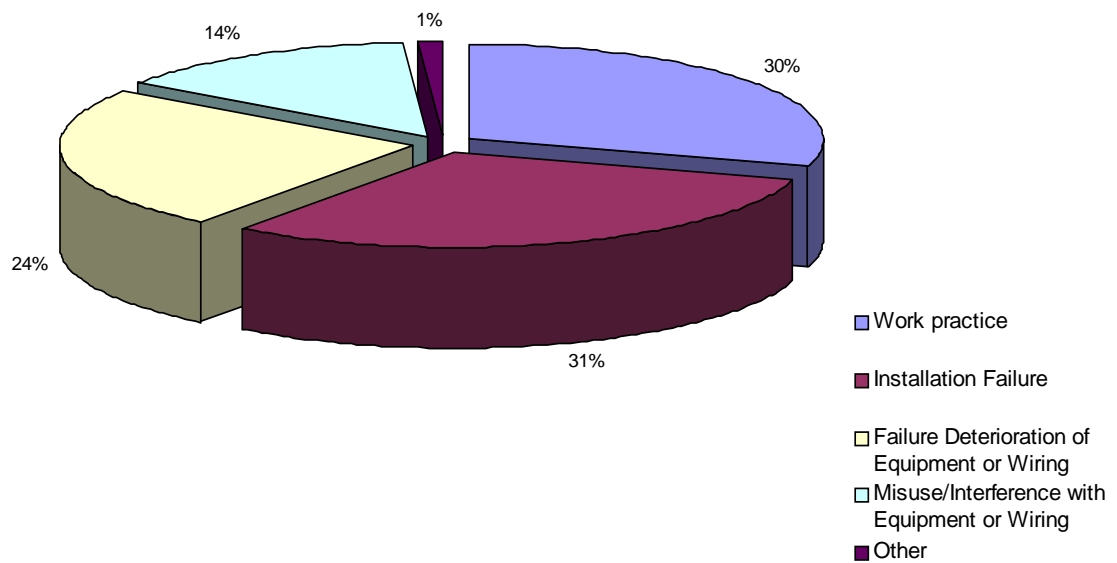


As not all serious electrical incidents are reported to regulators, the statistical data on serious incidents is included in this report for information only and should not be used for any comparison purpose.

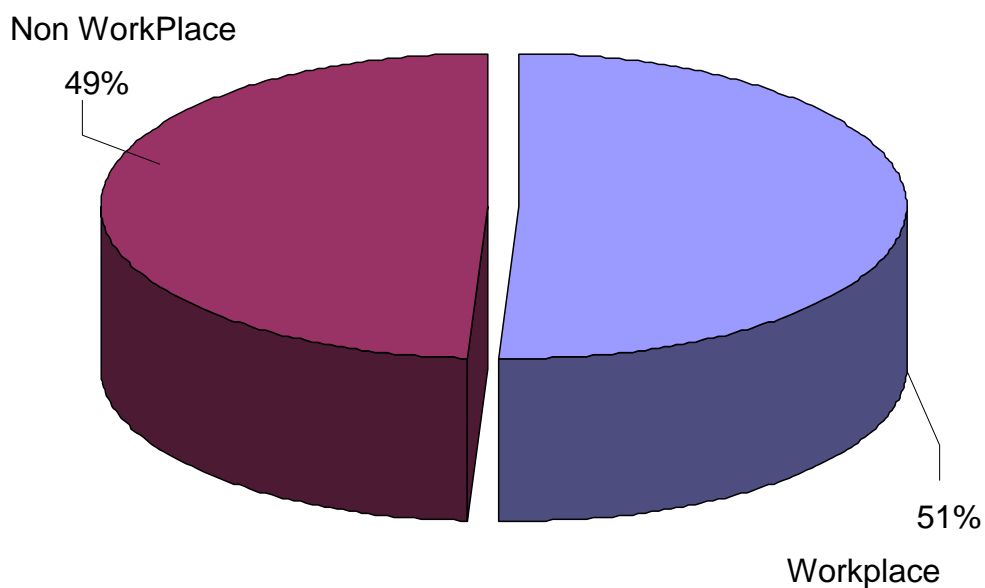
GRAPH 6.2 Serious Incidents in Australia and New Zealand in 2002-03



GRAPH 6.3 Circumstances of Serious Incidents Involving Consumer's Installation, Wiring and Equipment 2002-03

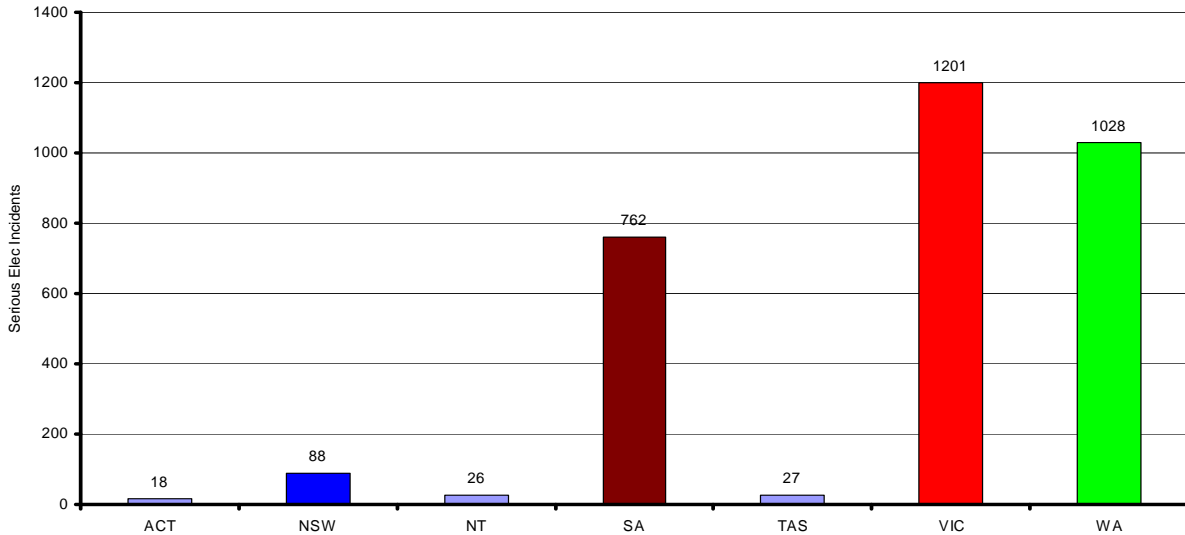


GRAPH 6.4 Work Related Serious Incidents in Australia and New Zealand 2002-03



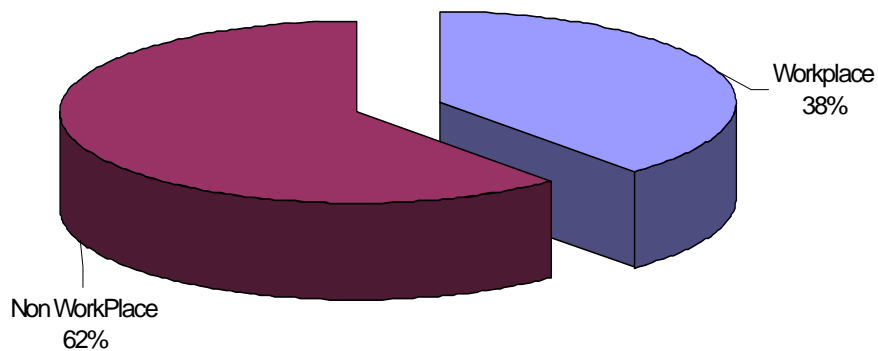
7. Minor Electrical Incidents

GRAPH 7.1 Minor Incidents in Australia and New Zealand 2002-03



As not all minor electrical incidents are reported to regulators and not all regulators keep records of minor incidents, the statistical data on minor incidents is included in this report for information only and should not be used for any comparison purpose.

GRAPH 7.2 Work Related Minor incidents in Australia and New Zealand 2002-03



GRAPH 7.3 Minor Incidents in Australia and New Zealand 2002-03
Sorted by Victim Category

