

Serious Gas Accident Data Report

Australia & New Zealand Financial Years 2010 - 2022



This report covers:

- Definitions & classifications
- Summary of the 2021-2022 year
- Series of graphs & tables for data supplied covering the period 1 July 2010 to 30 June 2022
 - 1. LPG accidents
 - 2. Natural gas (NG) accidents
 - 3. Gas injuries
 - 4. Tables Gas accidents information



Definitions and classifications

Serious gas accident

Any serious injury event that results from a gas (raw gas or a product of combustion) poisoning or suffocation, burn or injury by direct involvement of gas and gas equipment except if linked to the initial event of a natural disaster, criminal activity, suicide or self-harm.

Serious injury

Death or being admitted to hospital or requiring treatment from a medical practitioner (except a first aid treatment).

Accident type

CO poisoning – Unburned fuel gas CO poisoning – Incomplete

combustion

Unexpected and complete failure

Fire, explosion

Gas inhalation – Unburned fuel gas

Gas leak, escape

Excavation (third party hit)

Overheating

Other

Equipment site (environment)

Domestic Commercial Industrial Vehicle Marine craft

Recreation site

Other

Equipment type

Barbecue

Compressor

Container (cylinder)

Cooker, oven Dispenser Fuel cell

Heater - Cabinet heater (NZ only)

Heater - External Unflued (patio heater)

Heater - Pool

Heater - Open flued

Heater - Balanced Flue

Heater - Power flued

Heater - Unflued but not cabinet heater

Heater - Ducted

Installation pipework

Laundry dryer

Light, torch

Mains, services & regulator stations

Refrigerator Storage vessel Vaporiser

Water heater - Storage

Water heater – Instantaneous

Water heater – Boiler Water heater – Other

Decorative log effect appliances Commercial catering equipment

Type B (eg stationary engines, kilns, furnaces)

Other

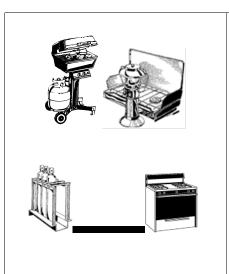


Summary of 2021-22

Serious gas accidents

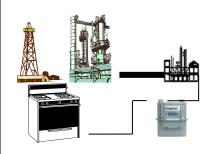
This page covers the 12-month period from 1 July 2021 to 30 June 2022. It is based on details of incidents reported to gas safety regulators in Australia and New Zealand.

Due to differences in reporting definitions and requirements for each state, this comparative report should be read with this in mind.



LPG (2021-22 only)

- Total 24 LPG accidents caused casualties (includes one fatality) to 28 people
- Barbecues were involved in 42% (10) and, cookers (or ovens) were involved in 38% (9) and water heater were involved in 13% (3) of accidents
- 79% (19) of 24 accidents occurred in a domestic or commercial environment



Natural Gas (NG) (2021-22 only)

- 8 NG accidents caused casualties (includes one fatality) to 8 people
- Water heater was involved in 63% (5), cooker, heater and installation were involved in 12% (1) each of accidents.
- 7 of accidents occurred in a domestic and one in industrial environment

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

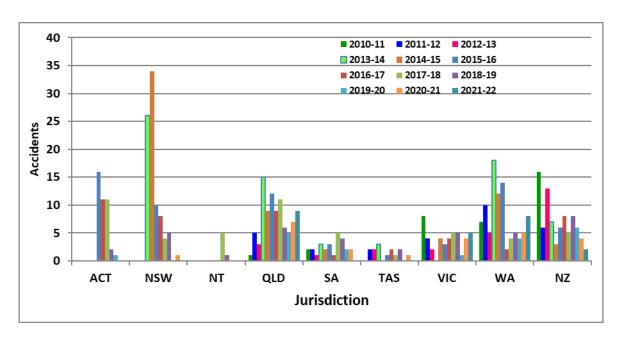


The following sections present data supplied in a series of charts and tables for years 2010-2022.

1- LPG Serious accidents

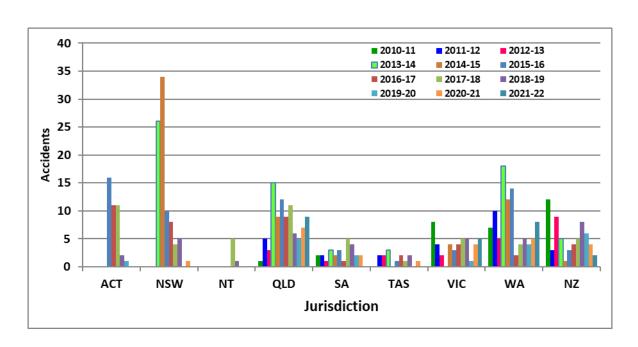
GRAPH 1.1a Australia & New Zealand (NZ) LPG accidents (Inclusive of NZ cabinet heater appliances)

> By state/country



GRAPH 1.1b Australia & New Zealand LPG accidents (Exclusive of NZ cabinet heater appliances)

> By state/country

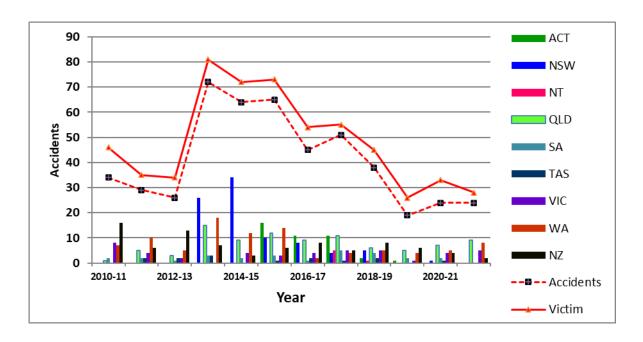




GRAPH 1.2a Australia & New Zealand LPG accidents

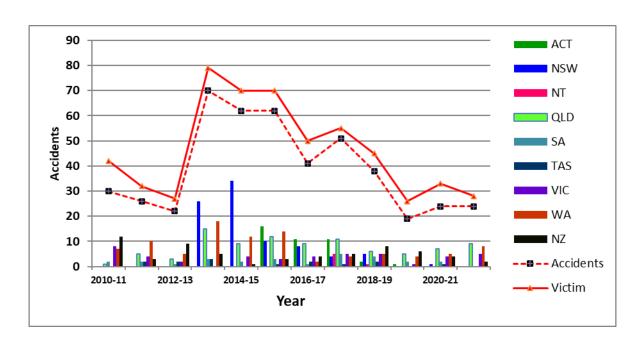
(Inclusive of NZ cabinet heater appliances)

> By year



GRAPH 1.2b Australia & New Zealand LPG accidents (Exclusive of NZ cabinet heater appliances)

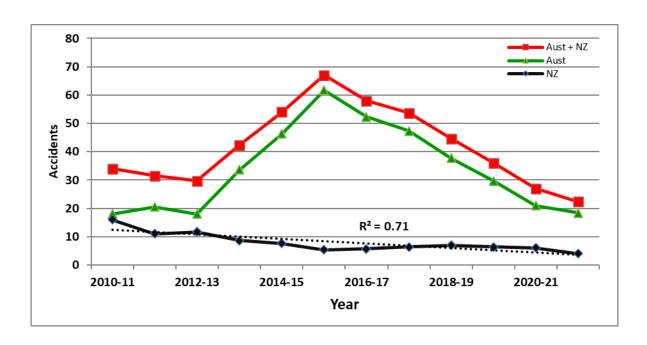
> By year





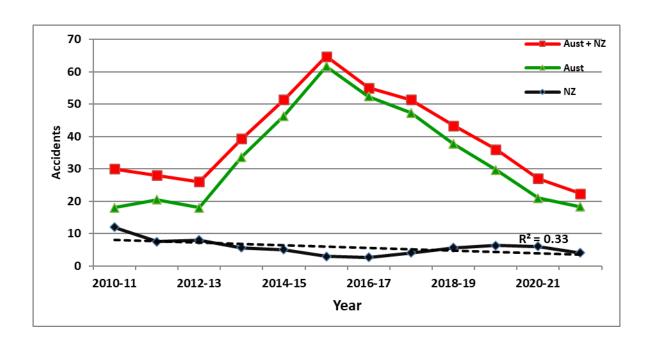
GRAPH 1.3a Australia & New Zealand LPG accidents (Inclusive of NZ cabinet heater appliances)

> By country (three-year running average)



GRAPH 1.3b Australia & New Zealand LPG accidents (Exclusive of NZ cabinet heater appliances)

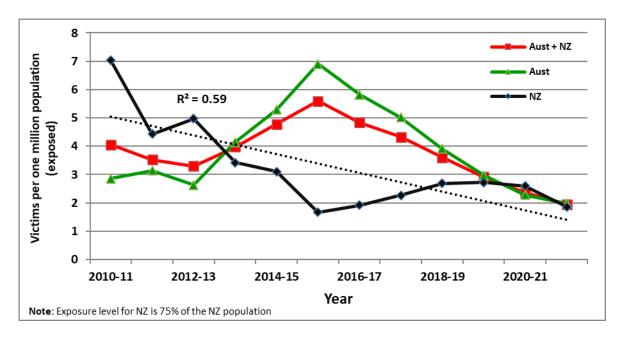
> By country (three-year running average)





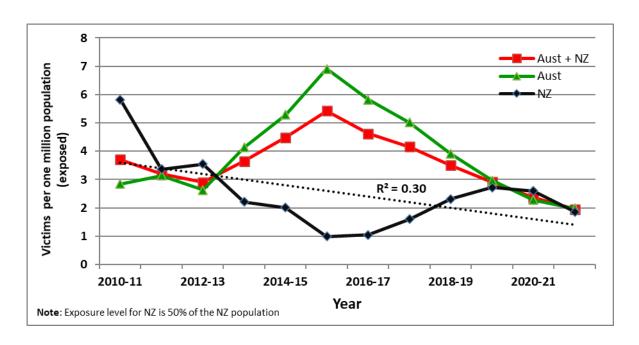
GRAPH 1.4a Australia & New Zealand LPG accidents trend (Inclusive of NZ cabinet heater appliances)

> By country (three-year running average victims per million population exposed in Australia and New Zealand)



GRAPH 1.4b Australia & New Zealand LPG accidents trend (Exclusive of NZ cabinet heater appliances)

> By country (three-year running average victims per million population exposed in Australia and New Zealand)

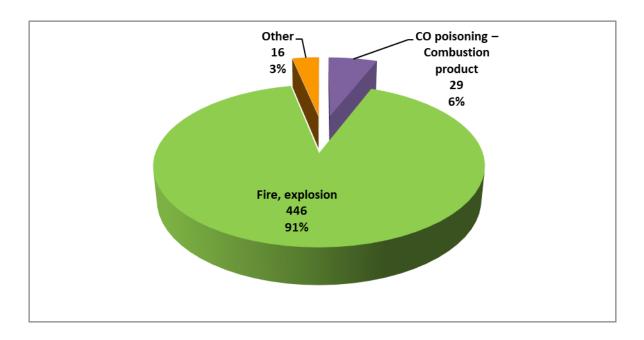




GRAPH 1.5a Australia & New Zealand LPG accidents

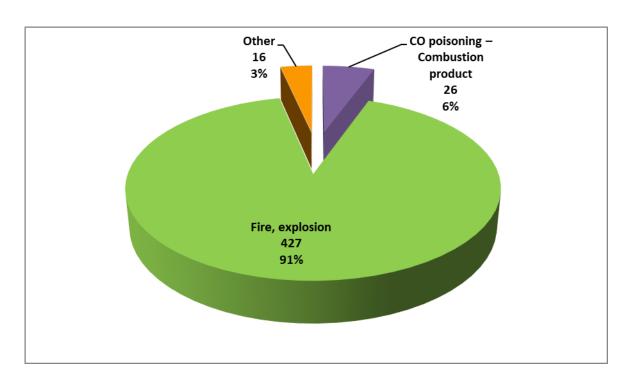
(Inclusive of NZ cabinet heater appliances)

> By accident type



GRAPH 1.5b Australia & New Zealand LPG accidents (Exclusive of NZ cabinet heater appliances)

> By accident type

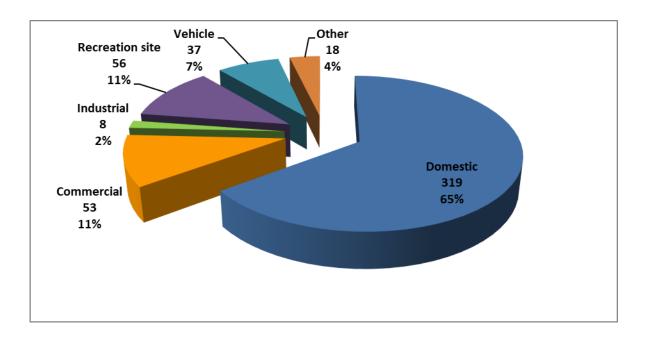




GRAPH 1.6a Australia & New Zealand LPG accidents

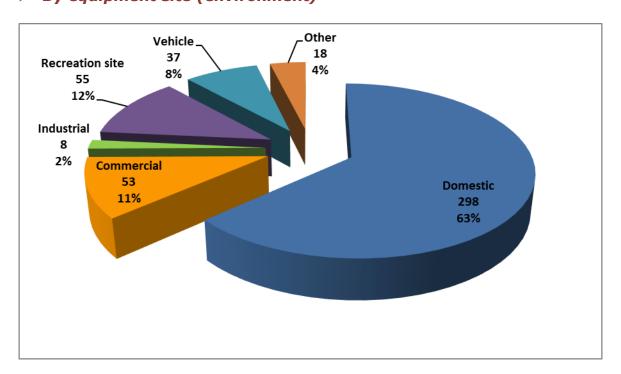
(Inclusive of NZ cabinet heater appliances)

> By equipment site (environment)



GRAPH 1.6b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

> By equipment site (environment)

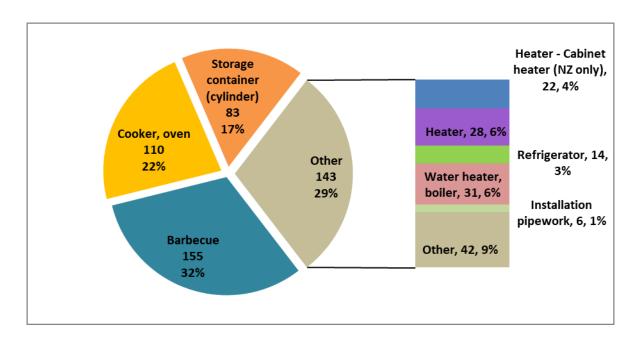




GRAPH 1.7a Australia & New Zealand LPG accidents

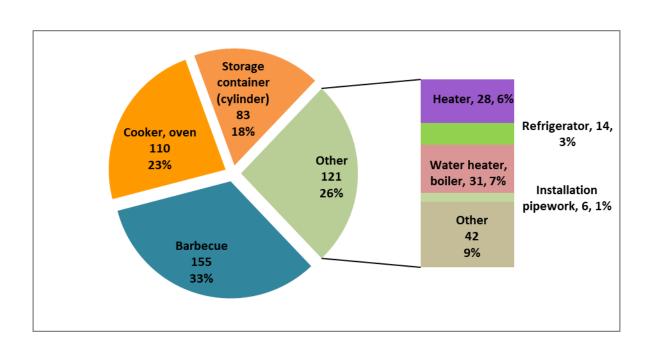
(Inclusive of NZ cabinet heater appliances)

> By equipment



GRAPH 1.7b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

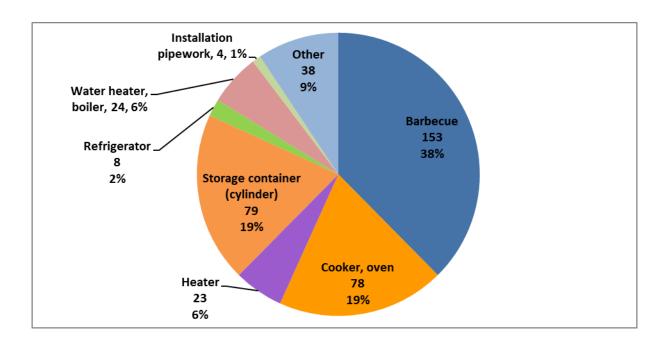
> By equipment





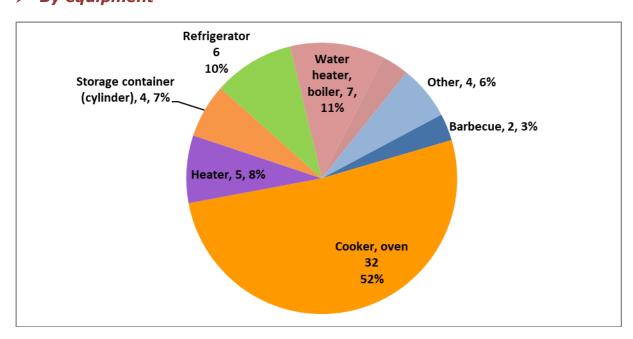
GRAPH 1.7b (i) Australia & New Zealand LPG accidents Australia

> By equipment



GRAPH 1.7b (ii) Australia & New Zealand LPG accidents New Zealand (Exclusive of cabinet heater appliances)

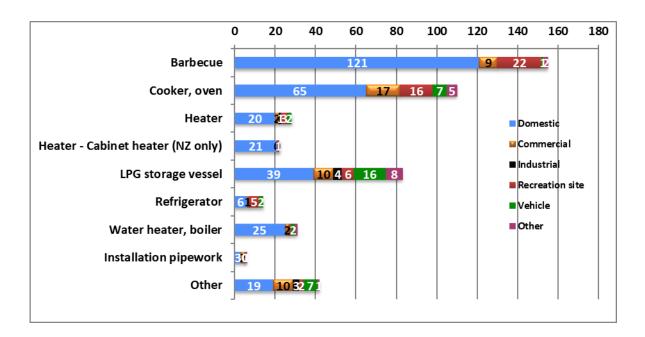
> By equipment





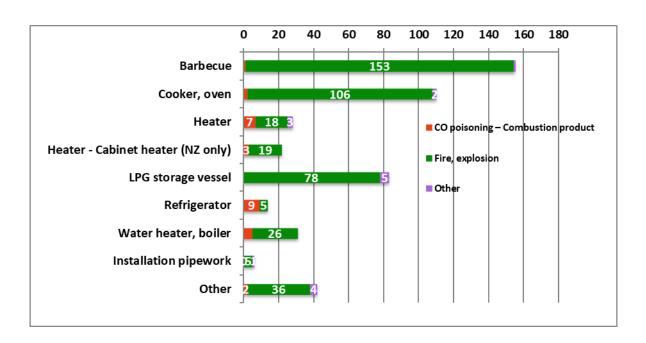
GRAPH 1.8 Australia & New Zealand LPG accidents

> By equipment & its site (environment)



GRAPH 1.9 Australia & New Zealand LPG accidents

> By equipment & accident type

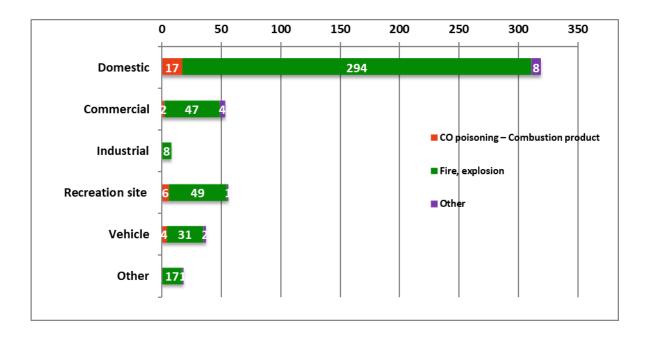




GRAPH 1.10a Australia & New Zealand LPG accidents

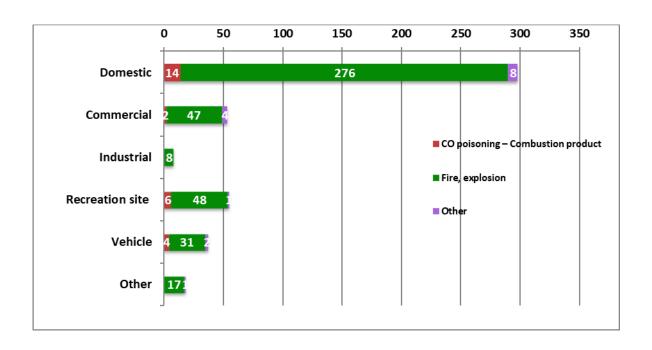
(Inclusive of NZ cabinet heater appliances)

> By equipment site (environment) & accident type



GRAPH 1.10b Australia & New Zealand LPG accidents (Exclusive of NZ cabinet heater appliances)

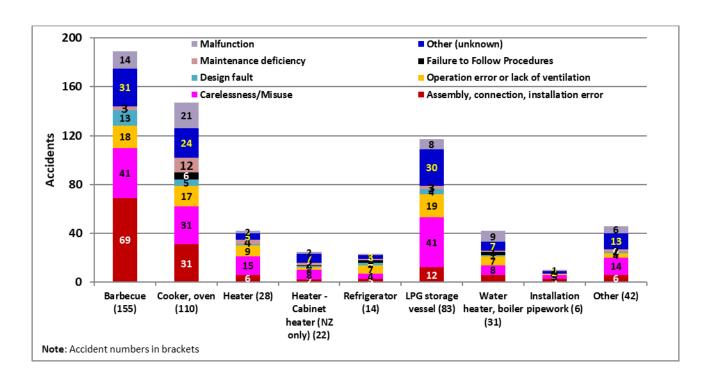
> By equipment site (environment) & accident type





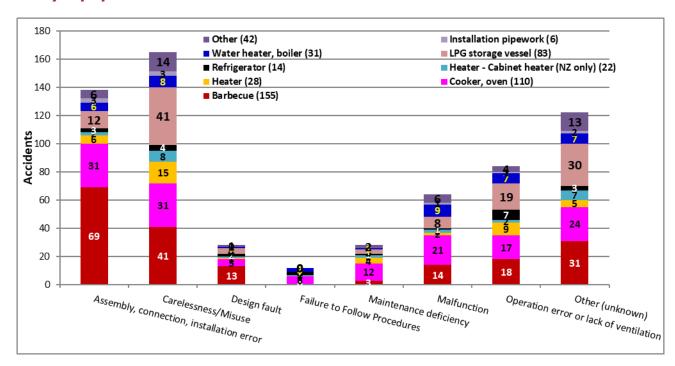
GRAPH 1.11a Australia & New Zealand LPG accidents

> By equipment & causal factors



GRAPH 1.11b Australia & New Zealand LPG accidents

> By equipment & causal factors

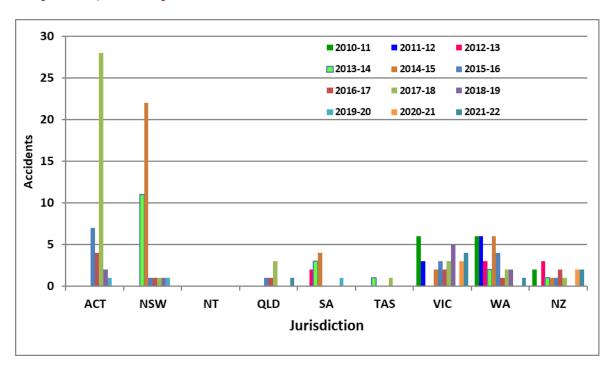




2- Natural Gas (NG) serious accidents

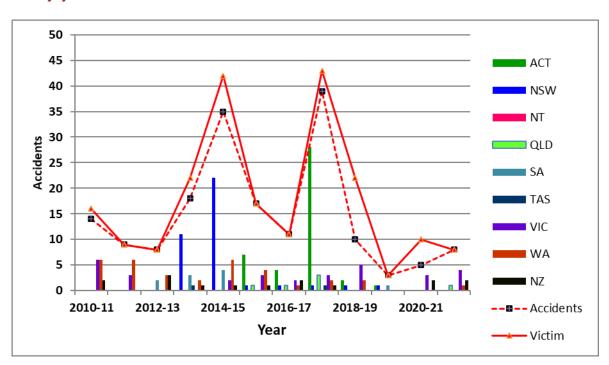
GRAPH 2.1 Australia & New Zealand NG accidents

> By state/country



GRAPH 2.2 Australia & New Zealand NG accidents

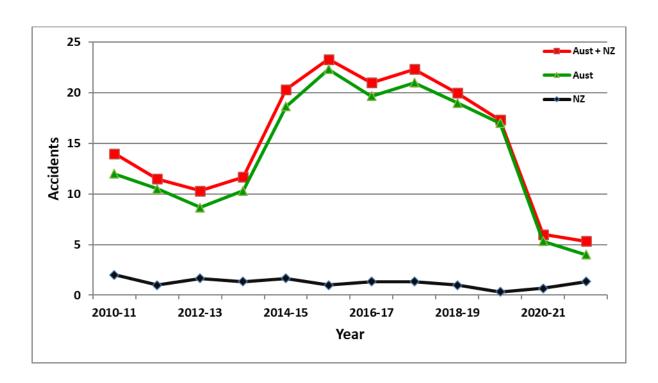
> By year





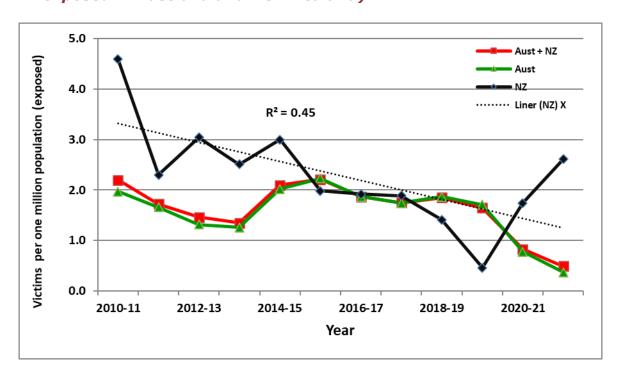
GRAPH 2.3 Australia & New Zealand NG accidents

> By country (three-year running average)



GRAPH 2.4 Australia & New Zealand NG accidents

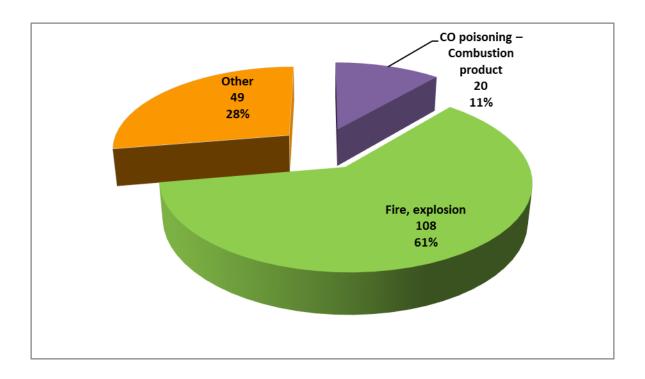
> By country (three-year running average victims per million population exposed in Australia and New Zealand)





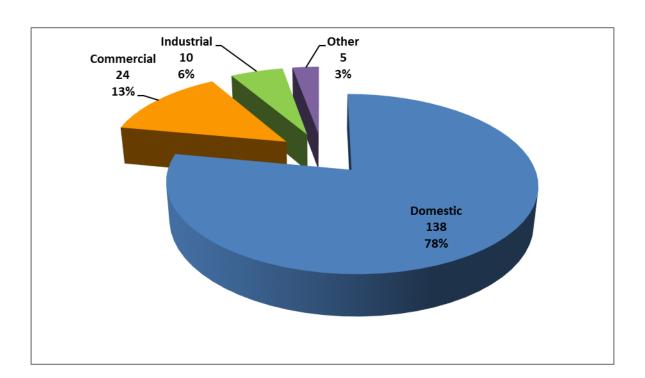
GRAPH 2.5 Australia & New Zealand NG accidents

> By accident type



GRAPH 2.6 Australia & New Zealand NG accidents

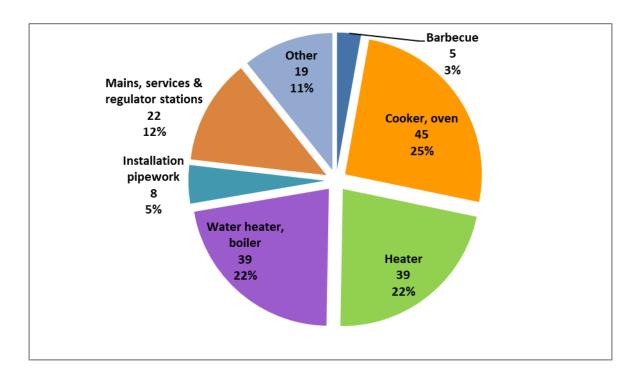
> By equipment site (environment)





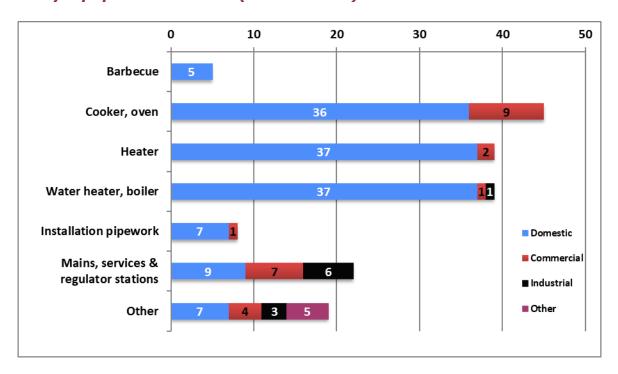
GRAPH 2.7 Australia & New Zealand NG accidents

> By equipment



GRAPH 2.8 Australia & New Zealand NG accidents

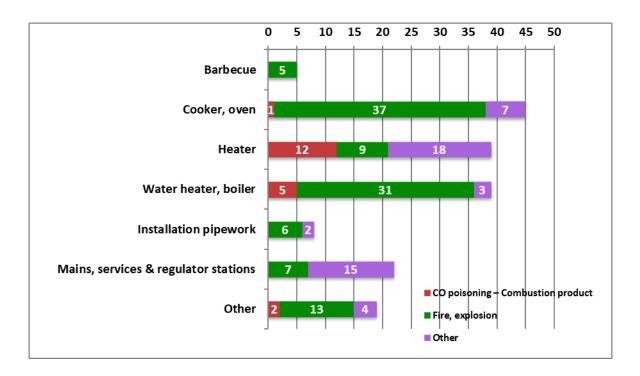
> By equipment & its site (environment)





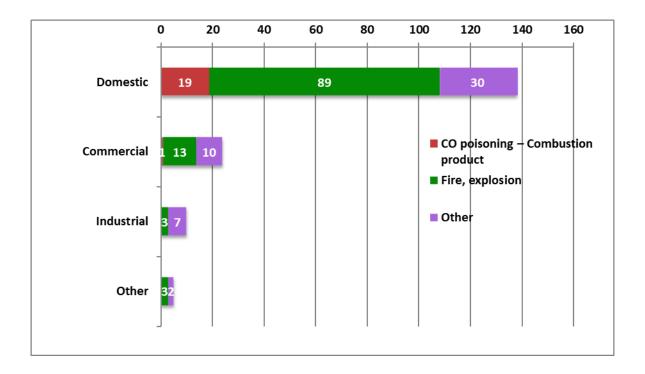
GRAPH 2.9 Australia & New Zealand NG accidents

> By equipment & accident type



GRAPH 2.10 Australia & New Zealand NG accidents

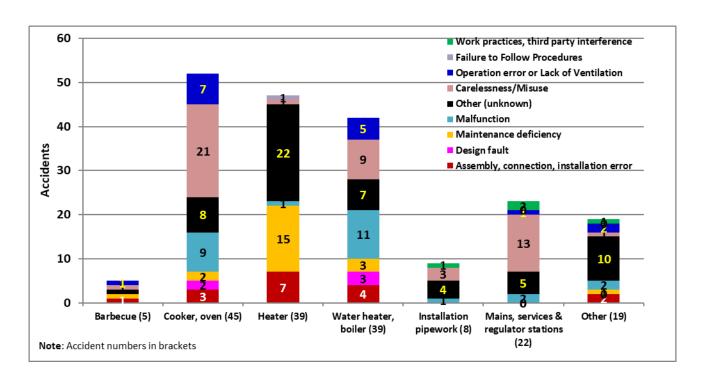
> By equipment site (environment) & accident type





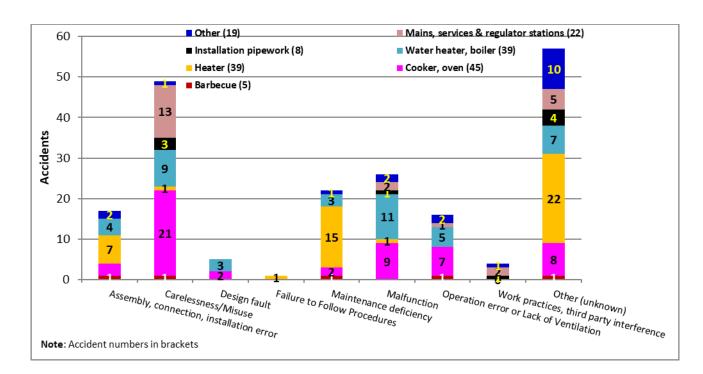
GRAPH 2.11a Australia & New Zealand NG accidents

> By equipment & causal factors



GRAPH 2.11b Australia & New Zealand NG accidents

By equipment & causal factors

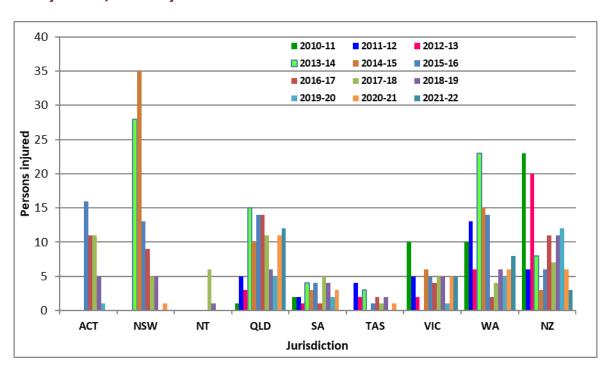




3- Gas injuries

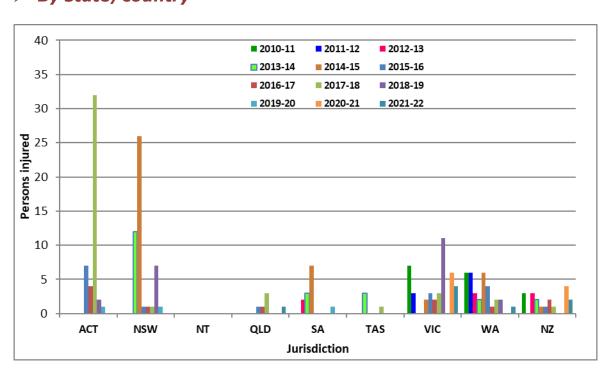
GRAPH 3.1a Australia & New Zealand gas injuries (LPG)

> By state/country



GRAPH 3.1b Australia & New Zealand gas injuries (NG)

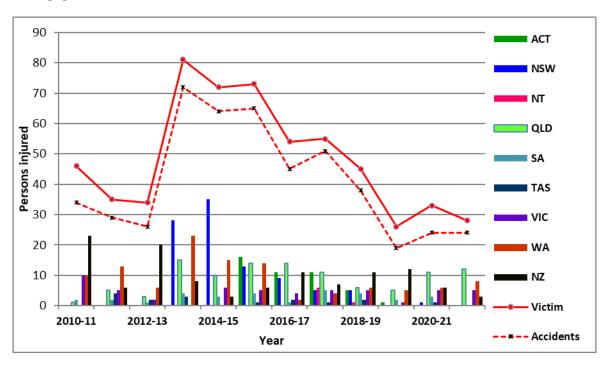
> By state/country





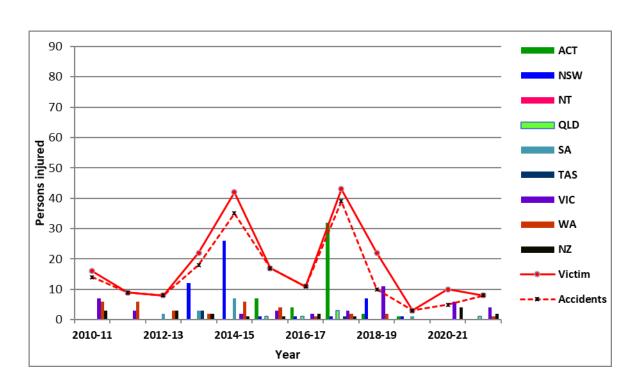
GRAPH 3.2a Australia & New Zealand gas injuries (LPG)

> By year



GRAPH 3.2a Australia & New Zealand gas injuries (NG)

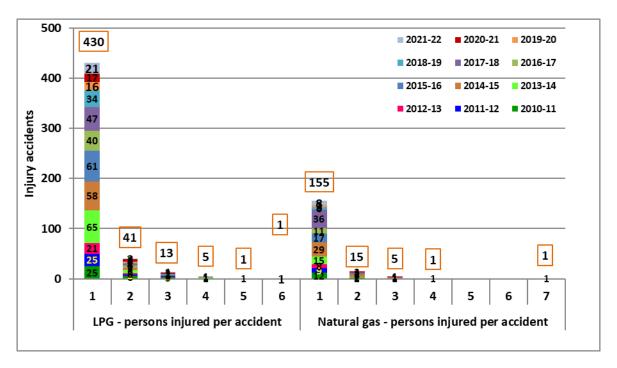
> By year





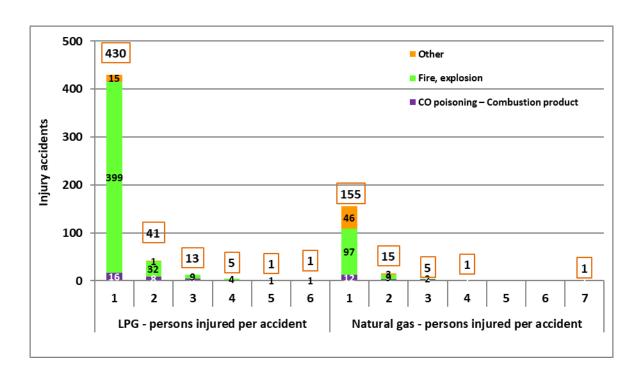
GRAPH 3.3 Australia & New Zealand gas injuries

> By consequence (injuries per accident)



GRAPH 3.4 Australia & New Zealand gas injuries

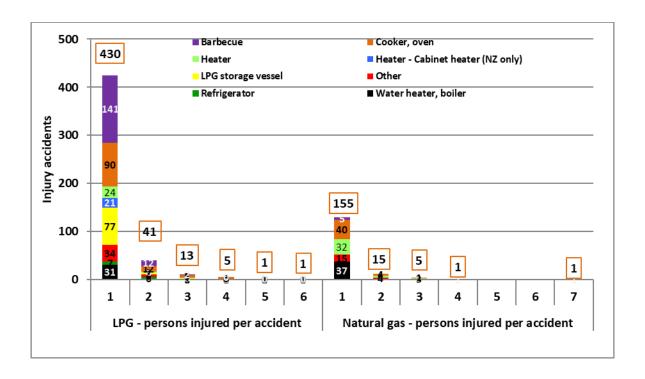
> By consequence (injuries per accident) & accident type





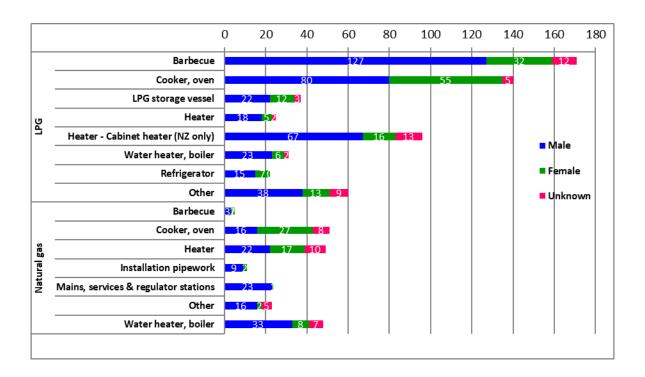
GRAPH 3.5 Australia & New Zealand gas injuries

> By consequence (injuries per accident) & equipment type



GRAPH 3.6 Australia & New Zealand gas injuries

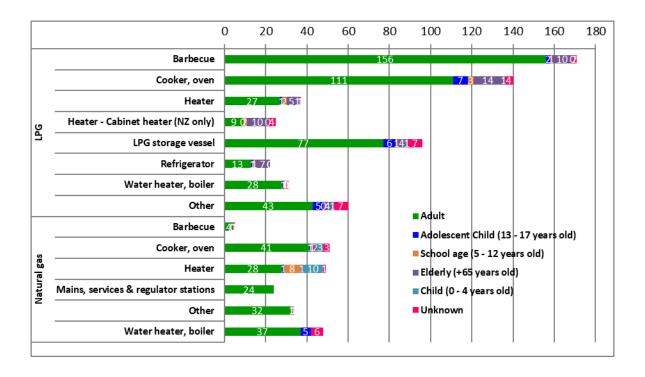
> By equipment type & victim's gender





GRAPH 3.7 Australia & New Zealand gas injuries

> By equipment type & victim's age





4. Injury accidents information

TABLE 4.1 Australia & New Zealand LPG accidents

Year	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Aust	NZ	Total
2010-2011				1	2		8	7	18	16	34
2011-2012				5	2	2	4	10	23	6	29
2012-2013				3	1	2	2	5	13	13	26
2013-2014		26		15	3	3	0	18	65	7	72
2014-2015		34		9	2	0	4	12	61	3	64
2015-2016	16	10		12	3	1	3	14	59	6	65
2016-2017	11	8		9	1	2	4	2	37	8	45
2017-2018	11	4	5	11	5	1	5	4	46	5	51
2018-2019	2	5	1	6	4	2	5	5	30	8	38
2019-2020	1	0	0	5	2	0	1	4	13	6	19
2020-2021	0	1	0	7	2	1	4	5	20	4	24
2021-2022	0		0	9	0	0	5	8	22	2	24
Total	41	88	6	92	27	14	45	94	407	84	491



TABLE 4.2 Australia & New Zealand LPG injuries

Year	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Aust	NZ	Total
2010-2011				1	2		10	10	23	23	46
2011-2012				5	2	4	5	13	29	6	35
2012-2013				3	1	2	2	6	14	20	34
2013-2014		28		15	4	3	0	23	73	8	81
2014-2015		35		10	3	0	6	15	69	3	72
2015-2016	16	13		14	4	1	5	14	67	6	73
2016-2017	11	9		14	1	2	4	2	43	11	54
2017-2018	11	5	6	11	5	1	5	4	48	7	55
2018-2019	5	5	1	6	4	2	5	6	34	11	45
2019-2020	1	0	0	5	2	0	1	5	14	12	26
2020-2021	0	1	0	11	3	1	5	6	27	6	33
2021-2022	0		0	12	0	0	5	8	25	3	28
Total	44	96	7	107	31	16	53	112	466	116	582



TABLE 4.3 Australia & New Zealand NG accidents

Year	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Aust	NZ	Total
2010-2011							6	6	12	2	14
2011-2012							3	6	9	0	9
2012-2013					2		0	3	5	3	8
2013-2014		11			3	1	0	2	17	1	18
2014-2015		22			4	0	2	6	34	1	35
2015-2016	7	1		1	0	0	3	4	16	1	17
2016-2017	4	1		1	0	0	2	1	9	2	11
2017-2018	28	1		3		1	3	2	38	1	39
2018-2019	2	1	0	0	0	0	5	2	10	0	10
2019-2020	1	1		1					3	0	3
2020-2021							3		3	2	5
2021-2022				1			4	1	6	2	8
Total	42	38	0	7	9	2	31	33	162	15	177



TABLE 4.4 Australia & New Zealand NG injuries

Year	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Aust	NZ	Total
2010-2011							7	6	13	3	16
2011-2012							3	6	9	0	9
2012-2013					2		0	3	5	3	8
2013-2014		12			3	3	0	2	20	2	22
2014-2015		26			7	0	2	6	41	1	42
2015-2016	7	1		1	0	0	3	4	16	1	17
2016-2017	4	1		1	0	0	2	1	9	2	11
2017-2018	32	1	0	3		1	3	2	42	1	43
2018-2019	2	7	0	0	0	0	11	2	22	0	22
2019-2020	1	1			1				3	0	3
2020-2021							6		6	4	10
2021-2022				1			4	1	6	2	8
Total	46	49	0	6	13	4	41	33	192	19	211