

Serious Gas Accident Data Report

Australia & New Zealand Financial Years 2010 - 2024



This report covers:

- Definitions & classifications
- Summary of the 2023-2024 year
- Series of graphs & tables for data supplied covering the period 1 July 2010 to 30 June 2024
 - 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)

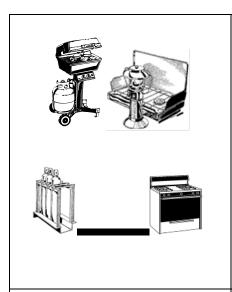
Other

Summary of 2023-24

Serious gas accidents

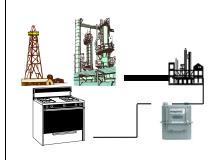
This page covers the 12-month period from 1 July 2023 to 30 June 2024. It is based on details of incidents reported to gas safety regulators in Australia and New Zealand.

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



LPG (2023-24 only)

- A total of 18 LPG accidents caused casualties (including one fatality) to 20 people
- Barbecues were involved in 33% (6) and cookers (or ovens) were involved in 44% (8) and heaters were involved in 6% (1) of accidents.
- 78% (14) of 18 accidents occurred in a domestic or commercial environment



Natural Gas (NG) (2023-24 only)

- 7 NG accidents caused casualties to 17 people
- Heaters were involved in 57% (4,) and Cooker, installation pipework and mains were involved in 14% (1) each of accidents
- 6 of accidents occurred in a domestic and one in commercial environment

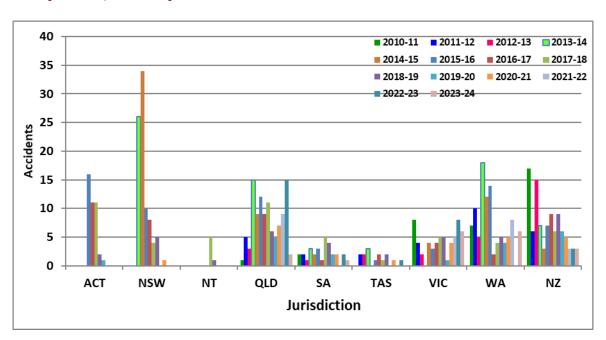
This report presents the information in a series of charts and tables.

The following sections present data supplied in a series of charts and tables for the years 2010-2024.

1- LPG Serious accidents

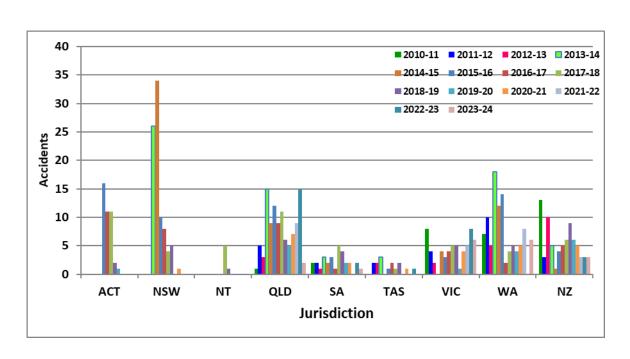
GRAPH 1.1a Australia & New Zealand (NZ) LPG accidents (Inclusive of NZ cabinet heater appliances)

> By state/country



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

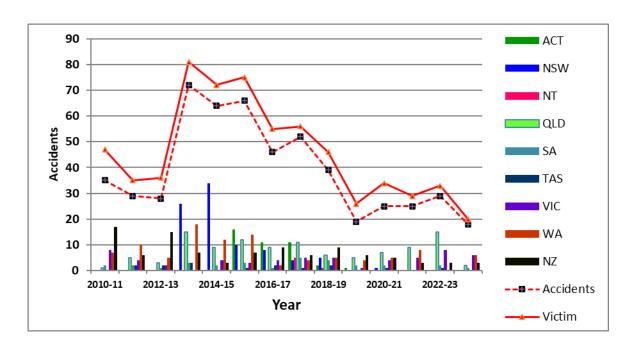
> By state/country



GRAPH 1.2a Australia & New Zealand LPG accidents

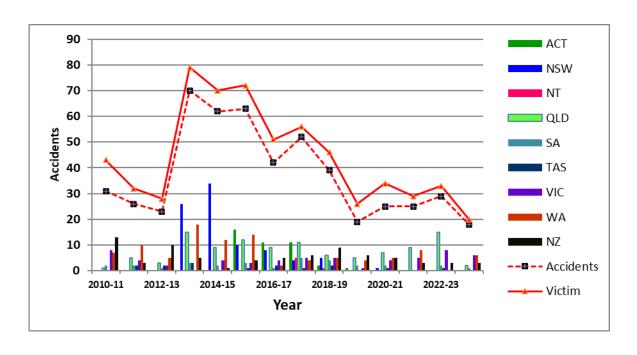
(Inclusive of NZ cabinet heater appliances)

> By year



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

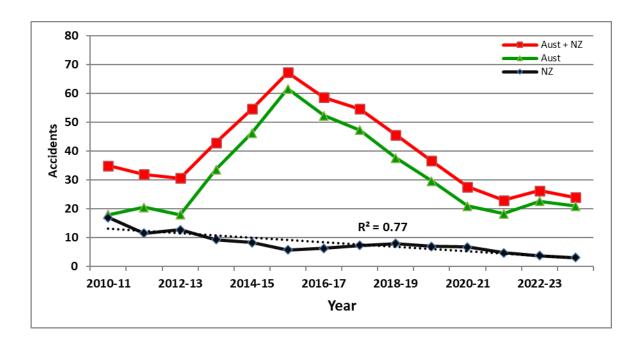
> By year



GRAPH 1.3a Australia & New Zealand LPG accidents

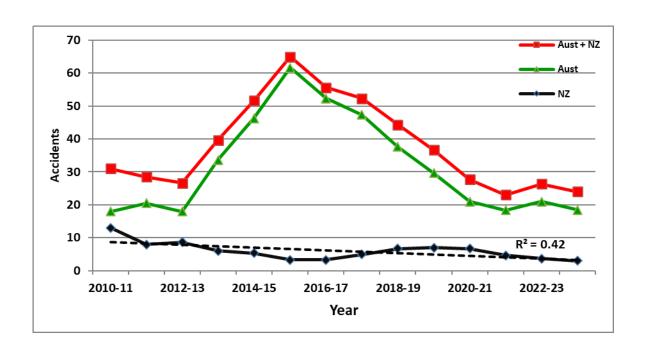
(Inclusive of NZ cabinet heater appliances)

> By country (three-year running average)



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

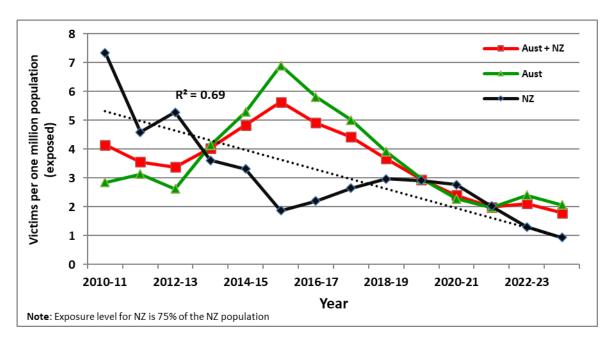
> By country (three-year running average)



GRAPH 1.4a Australia & New Zealand LPG accidents trend

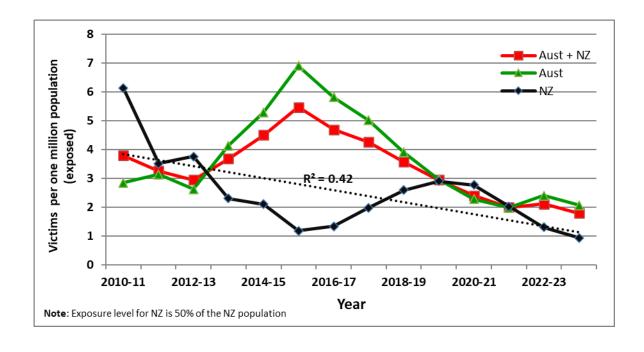
(Inclusive of NZ cabinet heater appliances)

> 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)

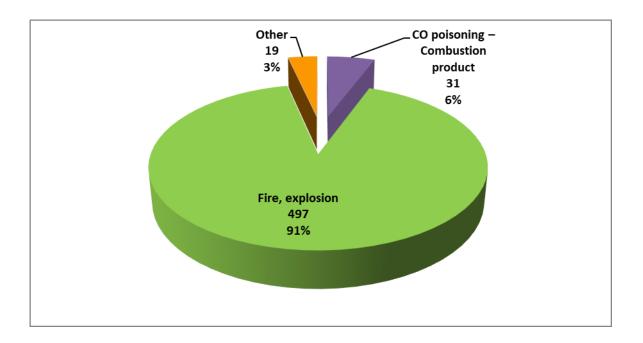
> By country (three-year running average victims per million population exposed in Australia and New Zealand)



GRAPH 1.5a Australia & New Zealand LPG accidents

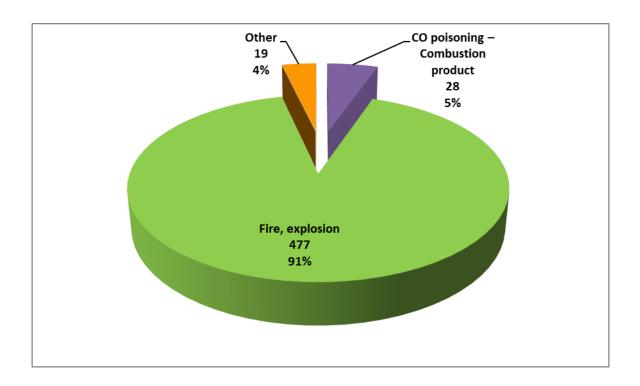
(Inclusive of NZ cabinet heater appliances)

> By accident type



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

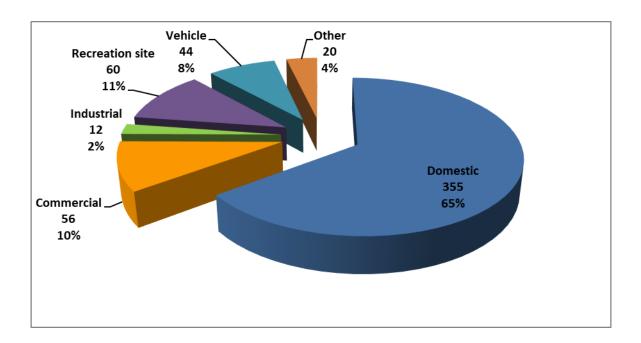
> By accident type



GRAPH 1.6a Australia & New Zealand LPG accidents

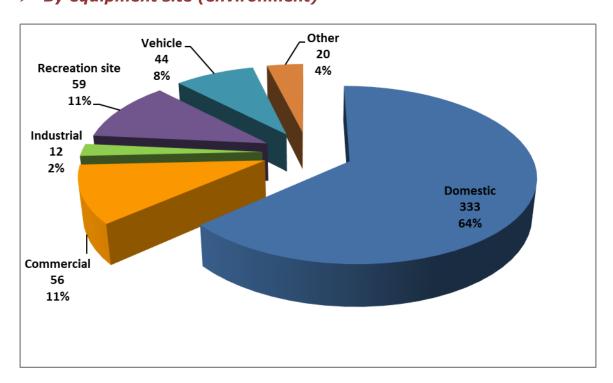
(Inclusive of NZ cabinet heater appliances)

> By equipment site (environment)



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

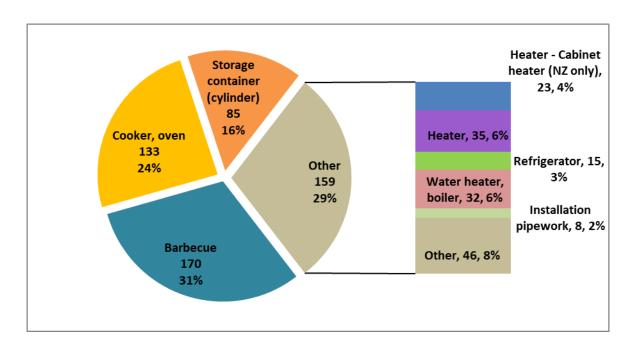
> By equipment site (environment)



GRAPH 1.7a Australia & New Zealand LPG accidents

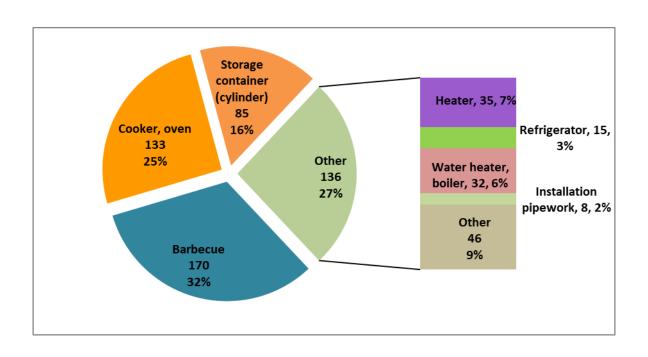
(Inclusive of NZ cabinet heater appliances)

> By equipment



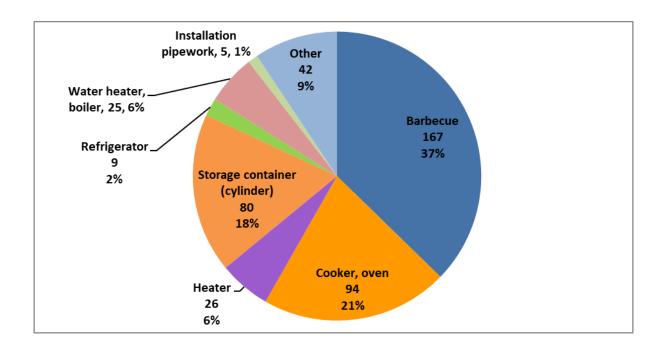
GRAPH 1.7b Australia & New Zealand LPG accidents (Exclusive of NZ cabinet heater appliances)

> By equipment



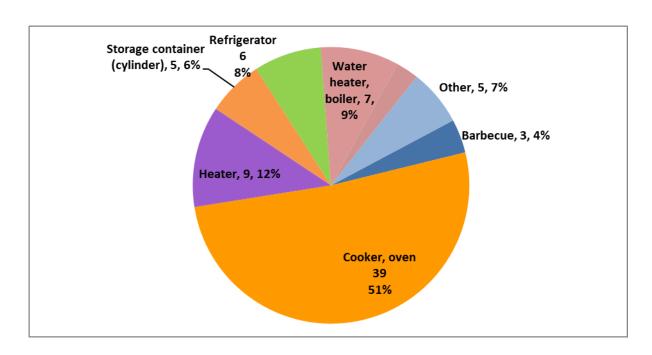
GRAPH 1.7b (i) Australia & New Zealand LPG accidents Australia

> By equipment



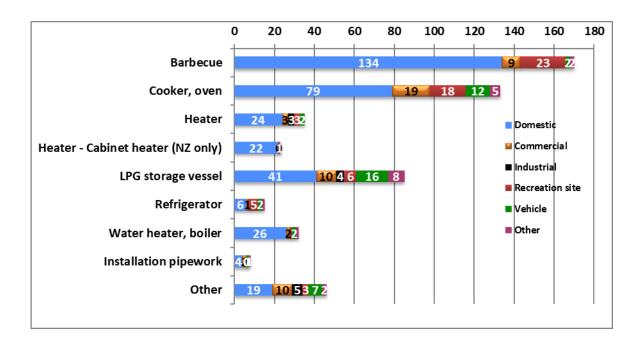
GRAPH 1.7b (ii) Australia & New Zealand LPG accidents New Zealand (Exclusive of cabinet heater appliances)

> By equipment



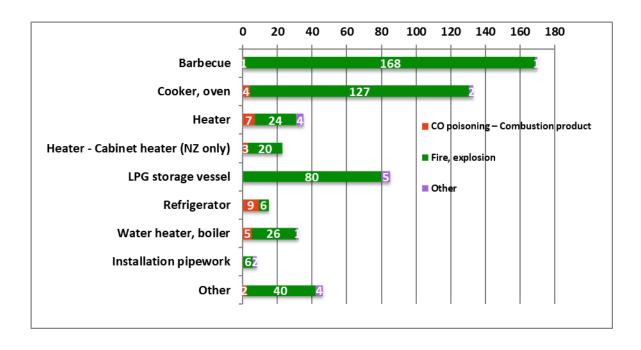
GRAPH 1.8 Australia & New Zealand LPG accidents

> By equipment & its site (environment)



GRAPH 1.9 Australia & New Zealand LPG accidents

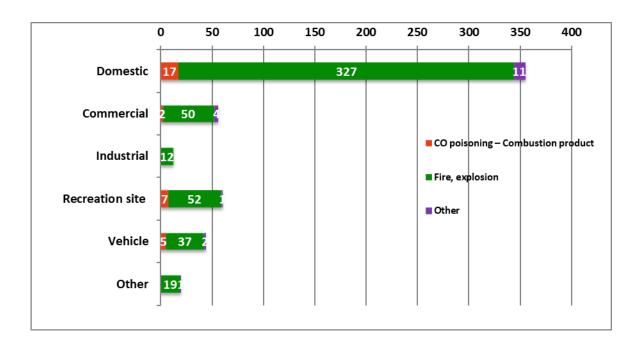
> By equipment & accident type



GRAPH 1.10a Australia & New Zealand LPG accidents

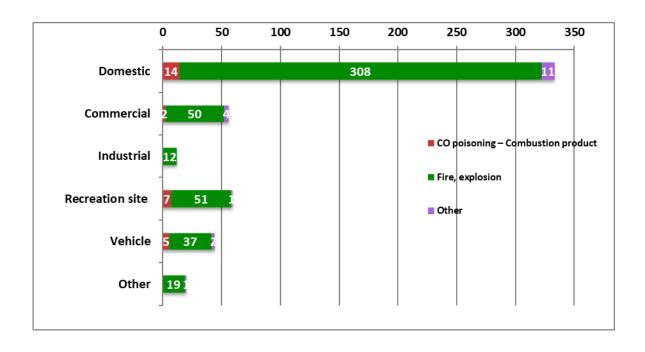
(Inclusive of NZ cabinet heater appliances)

> By equipment site (environment) & accident type



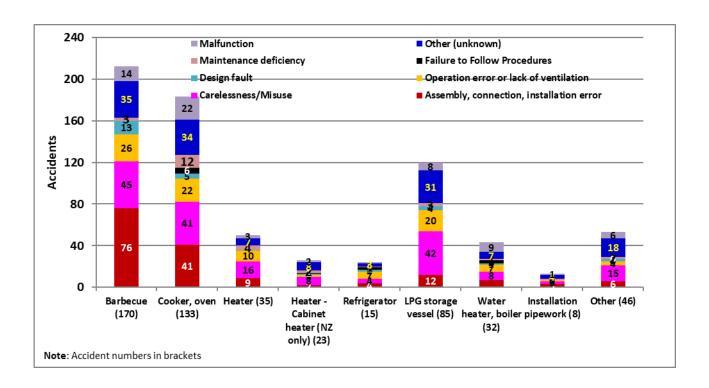
GRAPH 1.10b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

> By equipment site (environment) & accident type



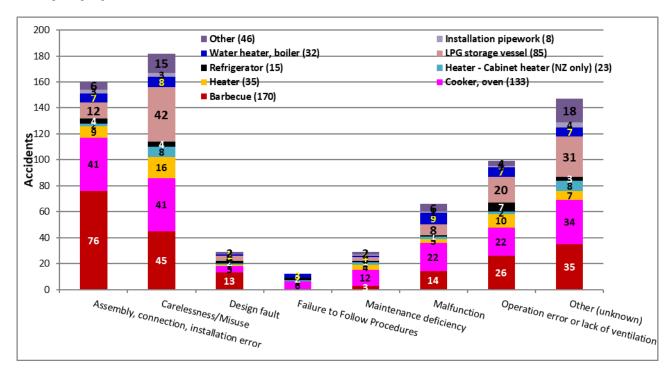
GRAPH 1.11a Australia & New Zealand LPG accidents

> By equipment & causal factors



GRAPH 1.11b Australia & New Zealand LPG accidents

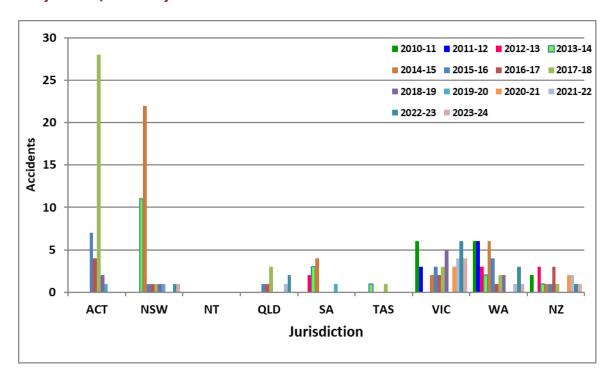
> By equipment & causal factors



2- Natural Gas (NG) serious accidents

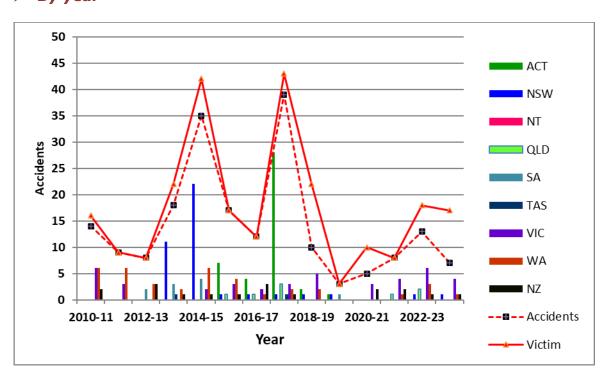
GRAPH 2.1 Australia & New Zealand NG accidents

> By state/country



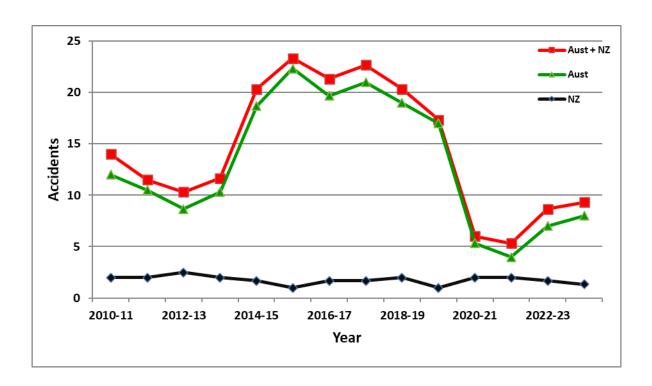
GRAPH 2.2 Australia & New Zealand NG accidents

> By year



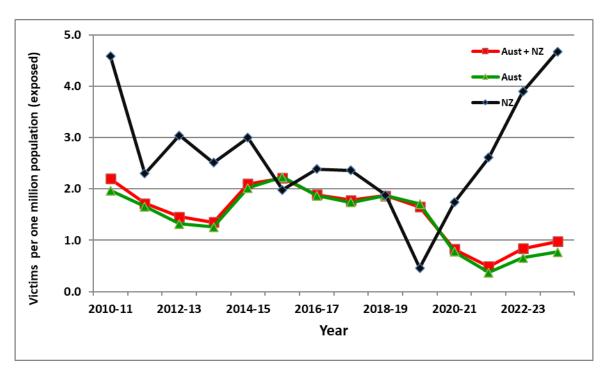
GRAPH 2.3 Australia & New Zealand NG accidents

> By country (three-year running average)



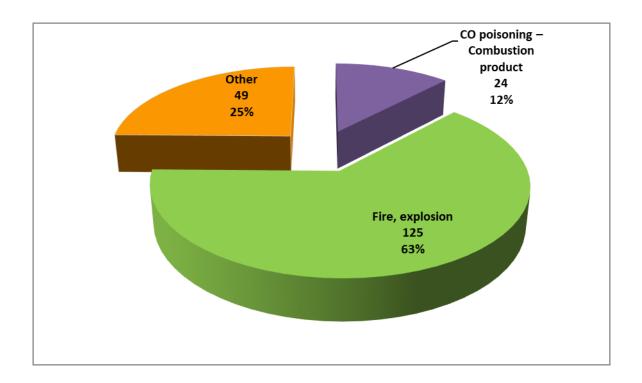
GRAPH 2.4 Australia & New Zealand NG accidents

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



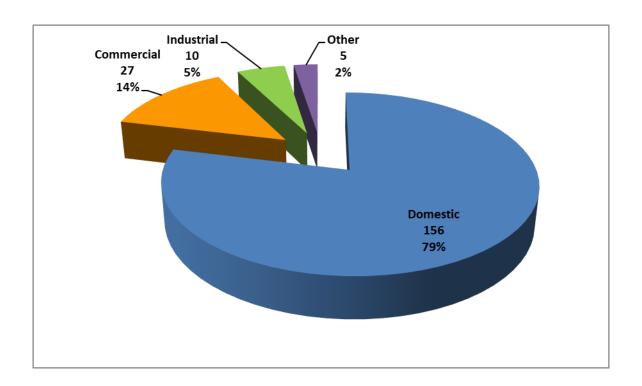
GRAPH 2.5 Australia & New Zealand NG accidents

> By accident type



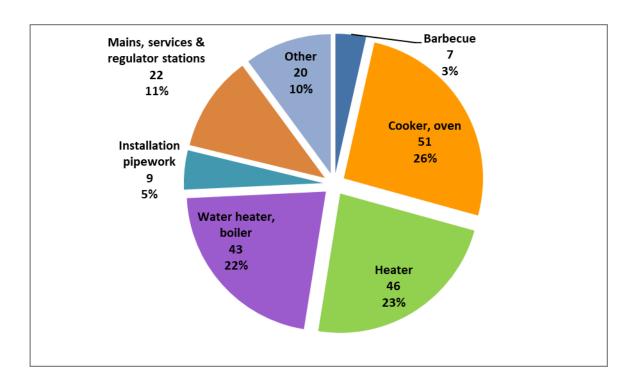
GRAPH 2.6 Australia & New Zealand NG accidents

> By equipment site (environment)



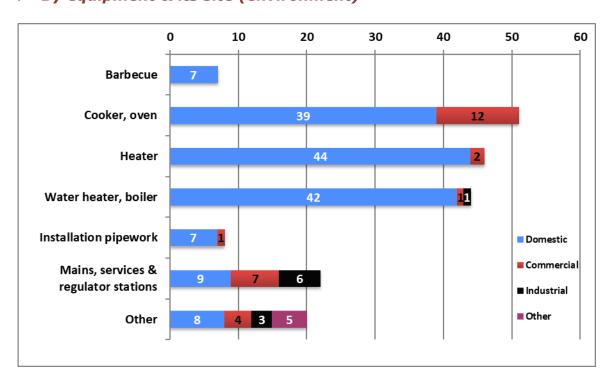
GRAPH 2.7 Australia & New Zealand NG accidents

> By equipment



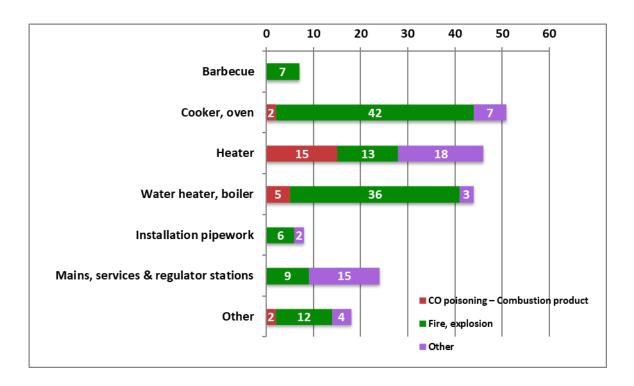
GRAPH 2.8 Australia & New Zealand NG accidents

> By equipment & its site (environment)



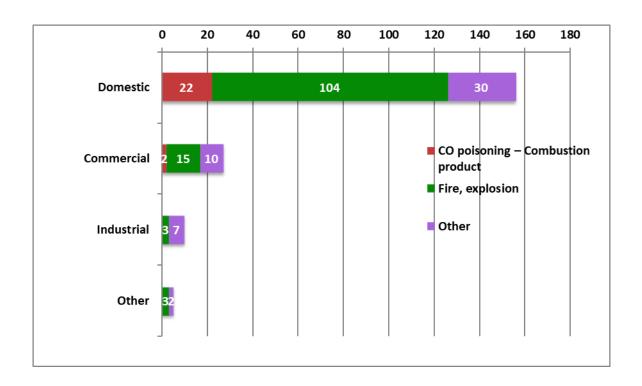
GRAPH 2.9 Australia & New Zealand NG accidents

> By equipment & accident type



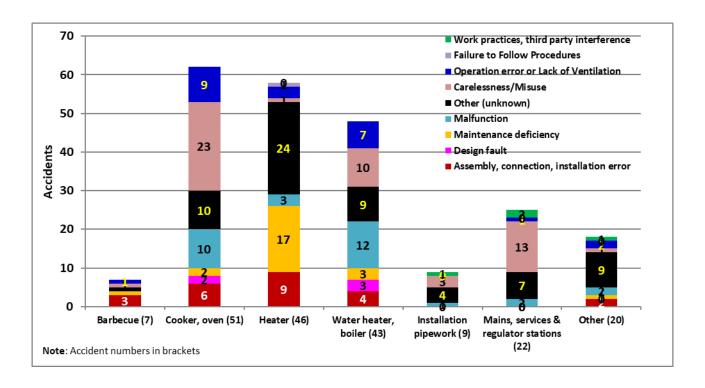
GRAPH 2.10 Australia & New Zealand NG accidents

> By equipment site (environment) & accident type



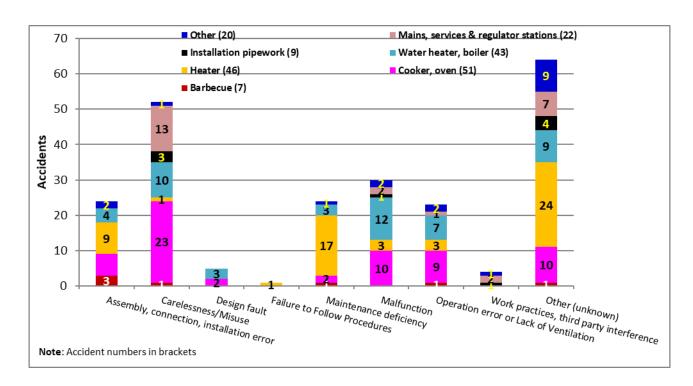
GRAPH 2.11a Australia & New Zealand NG accidents

> By equipment & causal factors



GRAPH 2.11b Australia & New Zealand NG accidents

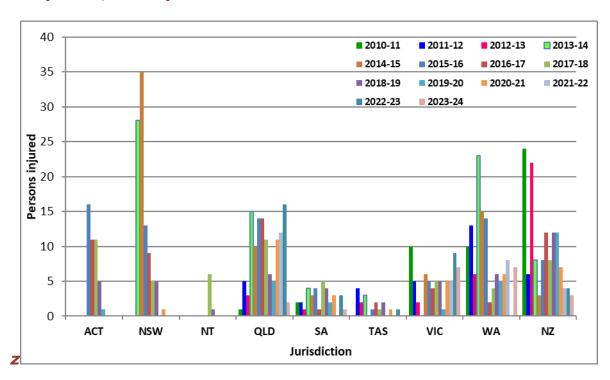
By equipment & causal factors



3- Gas injuries

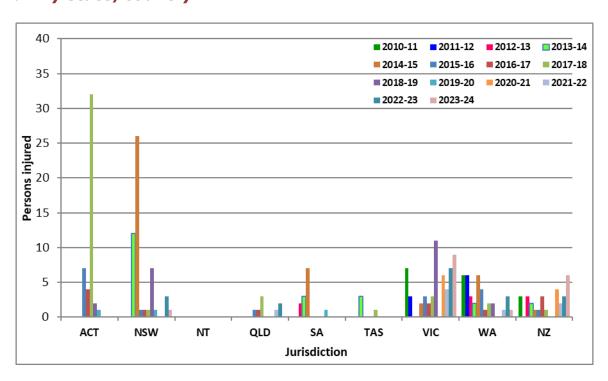
GRAPH 3.1a Australia & New Zealand gas injuries (LPG)

> By state/country



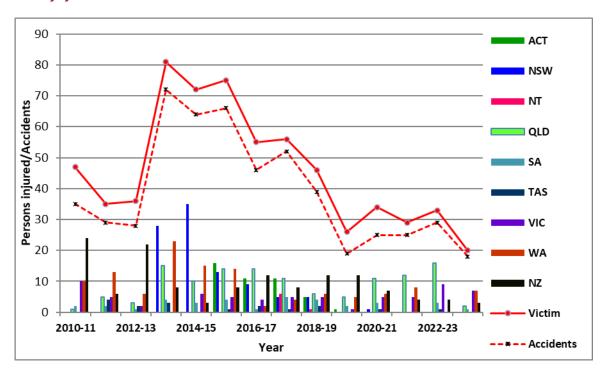
GRAPH 3.1b Australia & New Zealand gas injuries (NG)

> By state/country



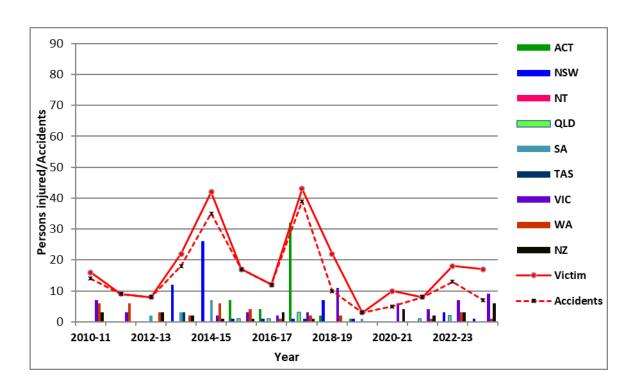
GRAPH 3.2a Australia & New Zealand gas injuries (LPG)

> By year



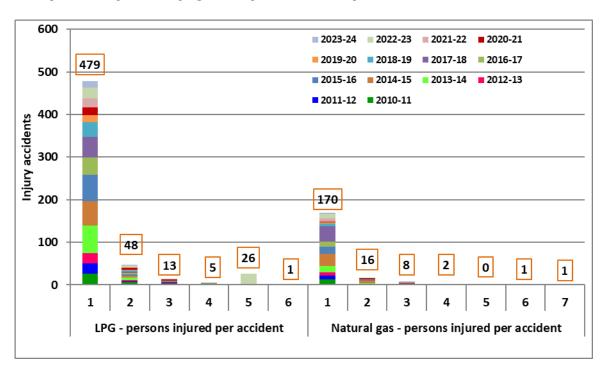
GRAPH 3.2a Australia & New Zealand gas injuries (NG)

> By year



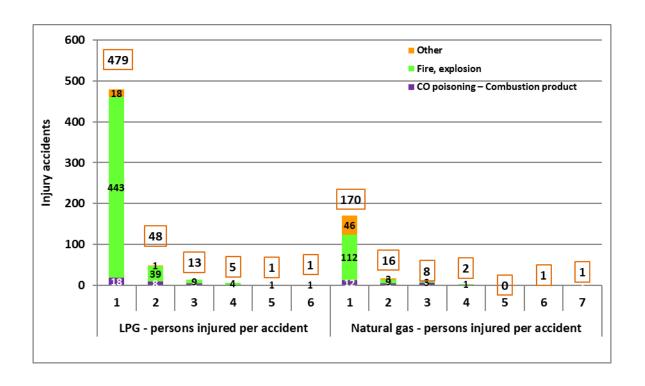
GRAPH 3.3 Australia & New Zealand gas injuries

> By consequence (injuries per accident)



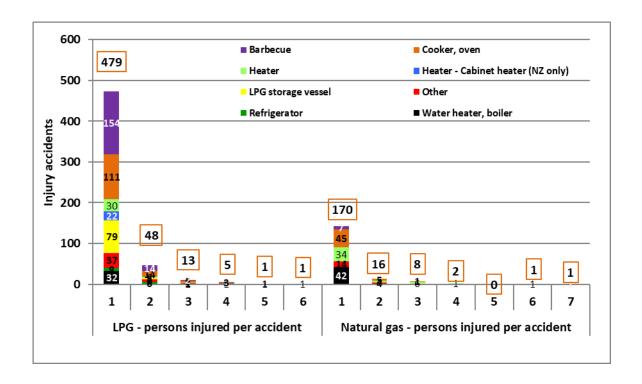
GRAPH 3.4 Australia & New Zealand gas injuries

> By consequence (injuries per accident) & accident type



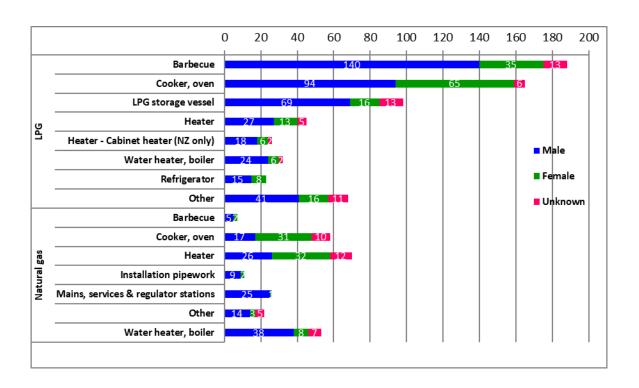
GRAPH 3.5 Australia & New Zealand gas injuries

> By consequence (injuries per accident) & equipment type



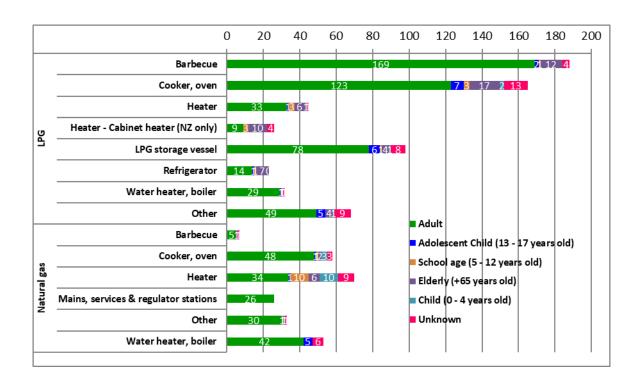
GRAPH 3.6 Australia & New Zealand gas injuries

> 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	17	35
2011-2012				5	2	2	4	10	23	6	29
2012-2013				3	1	2	2	5	13	15	28
2013-2014		26		15	3	3		18	65	7	72
2014-2015		34		9	2		4	12	61	3	64
2015-2016	16	10		12	3	1	3	14	59	7	66
2016-2017	11	8		9	1	2	4	2	37	9	46
2017-2018	11	4	5	11	5	1	5	4	46	6	52
2018-2019	2	5	1	6	4	2	5	5	30	9	39
2019-2020	1			5	2		1	4	13	6	19
2020-2021		1		7	2	1	4	5	20	5	25
2021-2022				9			5	8	22	3	25
2022-2023				15	2	1	8		26	3	29
2023-2024				2	1		6	6	15	3	18
Total	41	88	6	109	30	15	59	100	448	99	547



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	24	47
2011-2012				5	2	4	5	13	29	6	35
2012-2013				3	1	2	2	6	14	22	36
2013-2014		28		15	4	3		23	73	8	81
2014-2015		35		10	3		6	15	69	3	72
2015-2016	16	13		14	4	1	5	14	67	8	75
2016-2017	11	9		14	1	2	4	2	43	12	55
2017-2018	11	5	6	11	5	1	5	4	48	8	56
2018-2019	5	5	1	6	4	2	5	6	34	12	46
2019-2020	1			5	2		1	5	14	12	26
2020-2021		1		11	3	1	5	6	27	7	34
2021-2022				12			5	8	25	4	29
2022-2023				16	3	1	9		29	4	33
2023-2024				2	1		7	7	17	3	20
Total	44	96	7	125	35	17	69	119	512	133	645



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			3	5	3	8
2013-2014		11			3	1		2	17	1	18
2014-2015		22			4		2	6	34	1	35
2015-2016	7	1		1			3	4	16	1	17
2016-2017	4	1	0	1			2	1	9	3	12
2017-2018	28	1		3		1	3	2	38	1	39
2018-2019	2	1	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
2022-2023		1		2			6	3	12	1	13
2023-2024		1					4	1	6	1	7
Total	42	40	0	8	10	2	41	37	180	18	198



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			3	5	3	8
2013-2014		12			3	3		2	20	2	22
2014-2015		26			7		2	6	41	1	42
2015-2016	7	1		1			3	4	16	1	17
2016-2017	4	1	0	1			2	1	9	3	12
2017-2018	32	1	0	3		1	3	2	42	1	43
2018-2019	2	7	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
2022-2023		3		2			7	3	15	3	18
2023-2024		1					9	1	11	6	17
Total	46	53	0	8	13	4	57	37	218	29	247