

Serious Gas Accident Data Report

**Australia & New Zealand Financial Years
2010 – 2021**

This report covers:

- Definitions & classifications
- Summary of the 2020-2021 year
- Series of graphs & tables for data supplied covering the period 1 July 2010 to 30 June 2021
 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

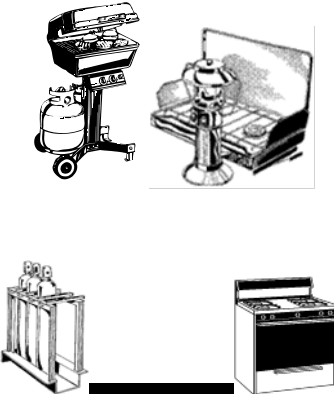
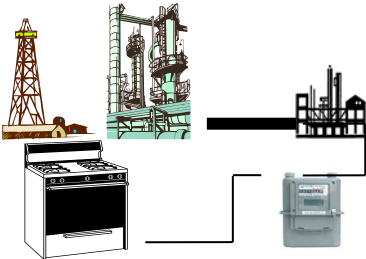
Mains, services & regulator stations
Refrigerator
Storage vessel
Vaporiser
Water heater – Storage
Water heater – Instantaneous
Water heater – Boiler
Water heater – Other
Decorative log effect appliances
Commercial catering equipment
Type B (eg stationary engines, kilns, furnaces)
Other

Summary of 2020-21

Serious gas accidents

This page covers the 12-month period from 1 July 2020 to 30 June 2021. 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.

	<p style="text-align: center;">LPG (2020-21 only)</p> <ul style="list-style-type: none"> • Total 23 LPG accidents caused casualties (includes two fatalities) to 32 people • Two of the accidents were fatal accidents that caused two fatalities • Barbecues were involved in 17% (4) and, cookers (or ovens) were involved in 22% (5) and storage vessels were involved in 39% (9) of accidents • All (23) of accidents occurred in a domestic or commercial environment
	<p style="text-align: center;">Natural Gas (NG) (2020-21 only)</p> <ul style="list-style-type: none"> • 3 NG accidents caused casualties to 6 people • No fatal accidents • Heater was involved in 33% (1) and, Mains, services & regulator stations were involved in 66% (2) of accidents. • All (3) of accidents occurred in a domestic or commercial environment

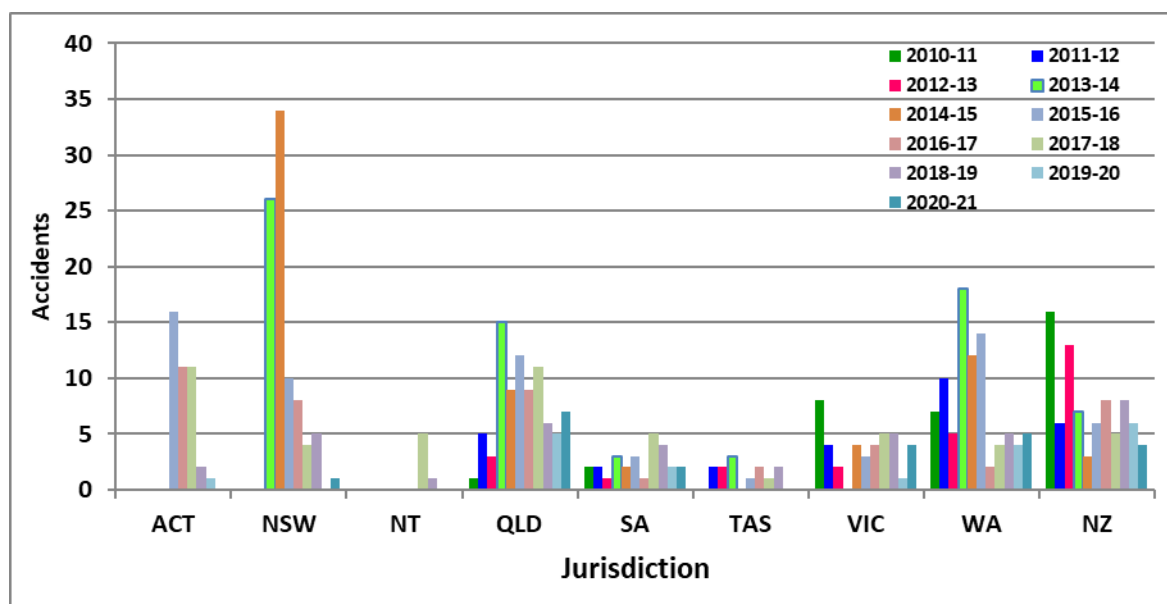
This report presents the information in a series of charts and tables.

The following sections present data supplied in a series of charts and tables for years 2010-2021.

1- LPG Serious accidents

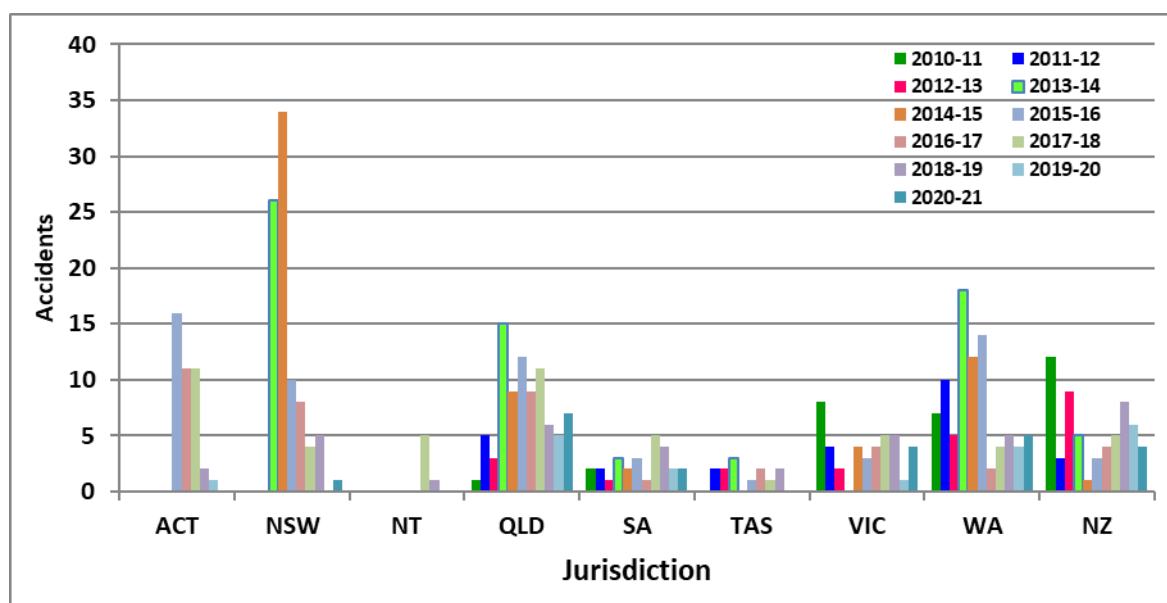
GRAPH 1.1a Australia & New Zealand (NZ) LPG accidents
(Inclusive of NZ cabinet heater appliances)

➤ *By state/country*



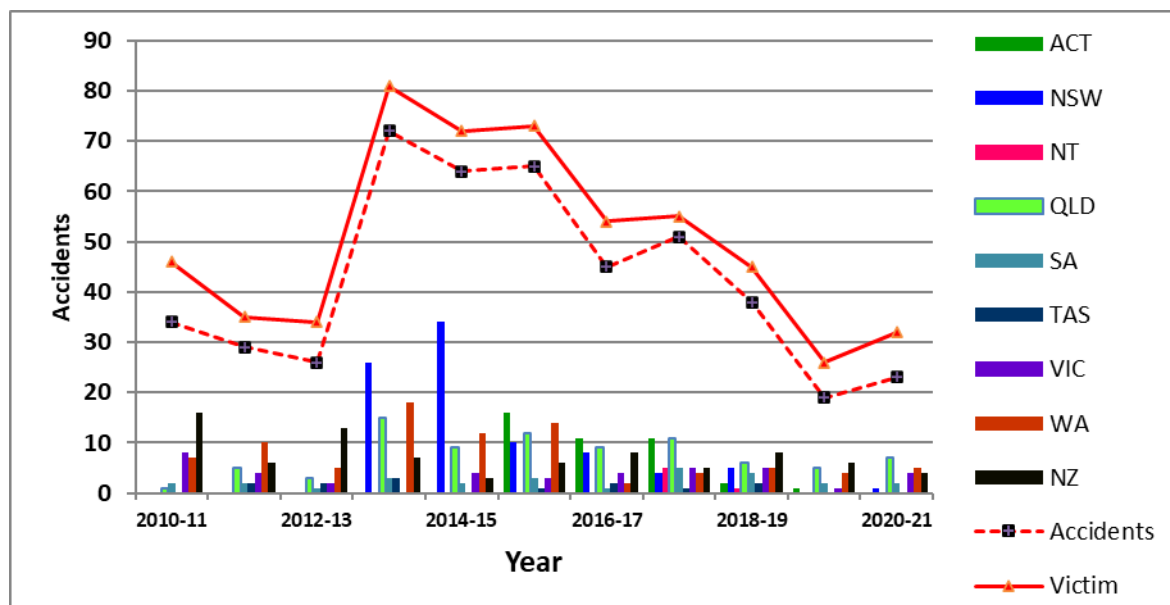
GRAPH 1.1b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

➤ *By state/country*



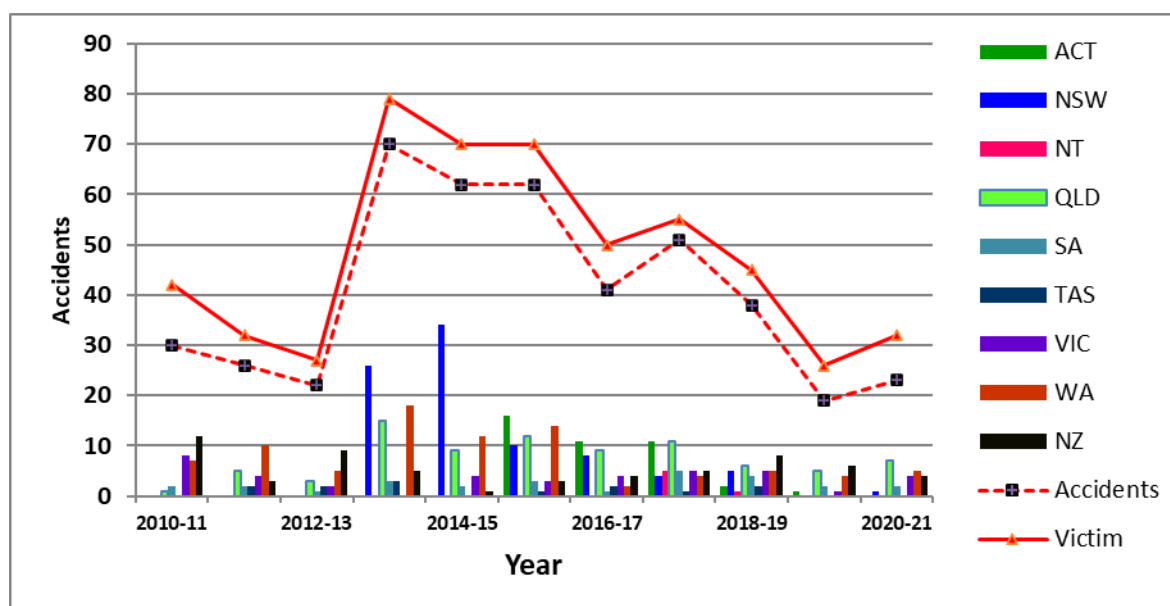
GRAPH 1.2a Australia & New Zealand LPG accidents
(Inclusive of NZ cabinet heater appliances)

➤ **By year**



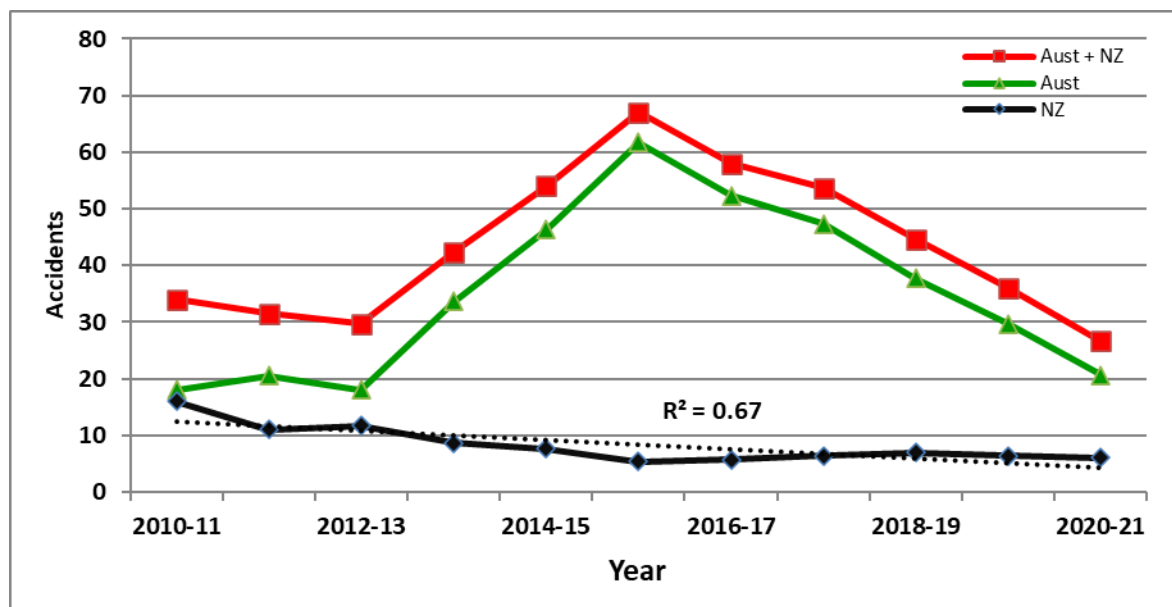
GRAPH 1.2b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

➤ **By year**



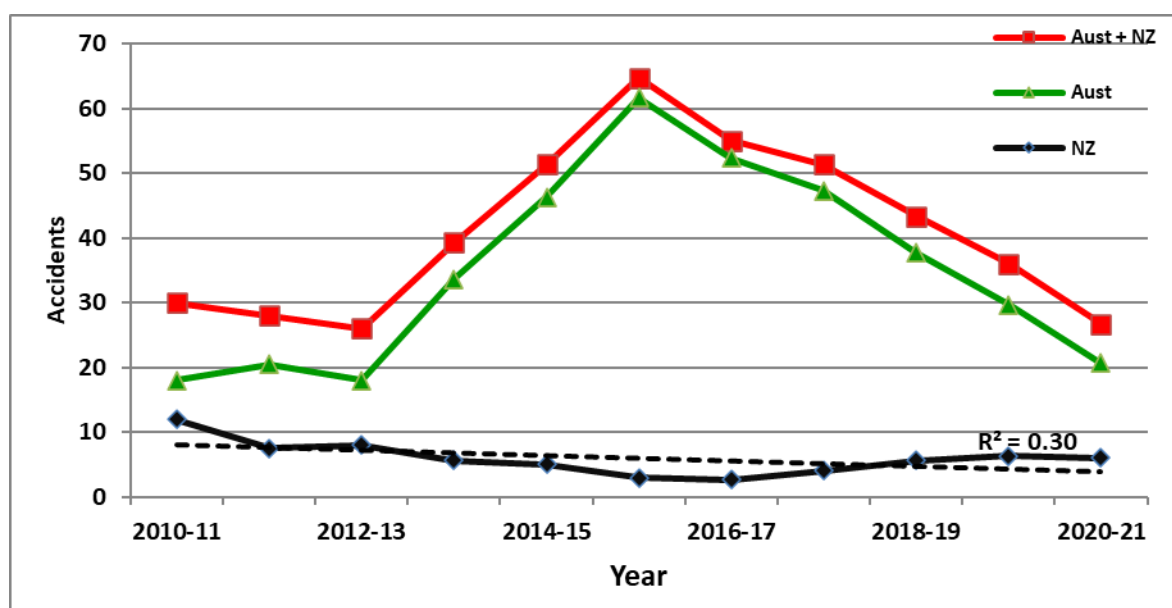
GRAPH 1.3a Australia & New Zealand LPG accidents
(Inclusive of NZ cabinet heater appliances)

➤ *By country (three-year running average)*



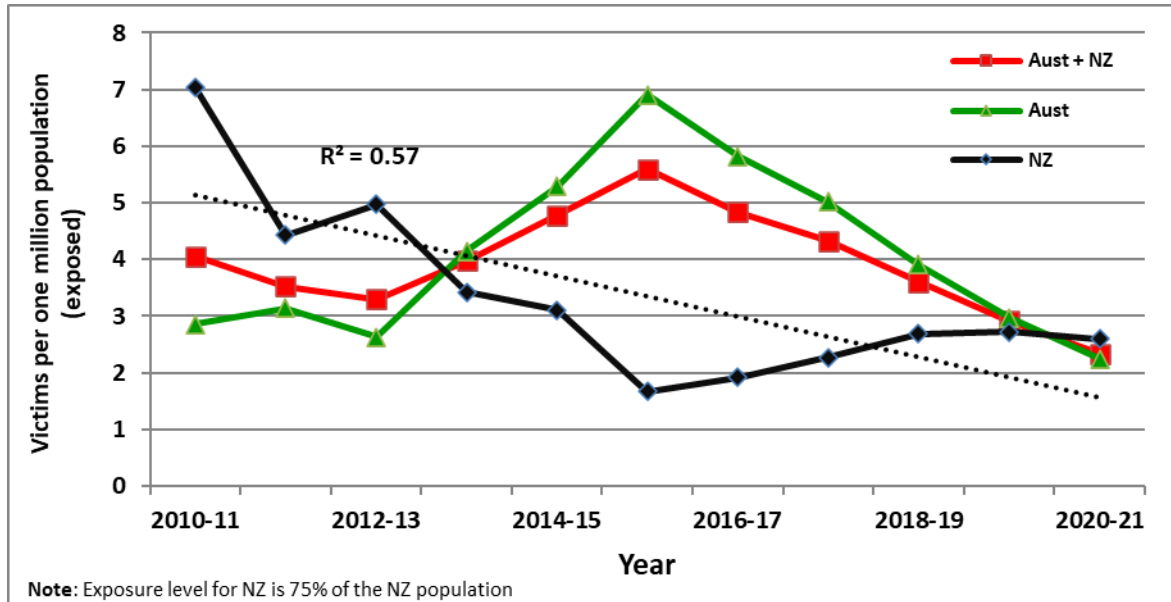
GRAPH 1.3b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

➤ *By country (three-year running average)*



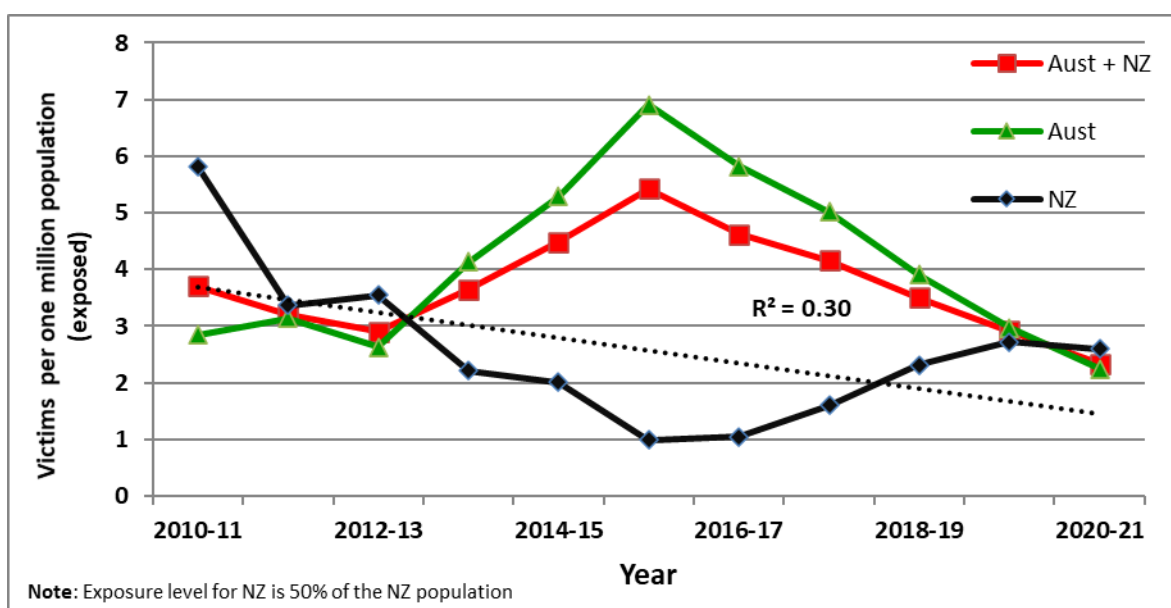
GRAPH 1.4a Australia & New Zealand LPG accidents trend
(Inclusive of NZ cabinet heater appliances)

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



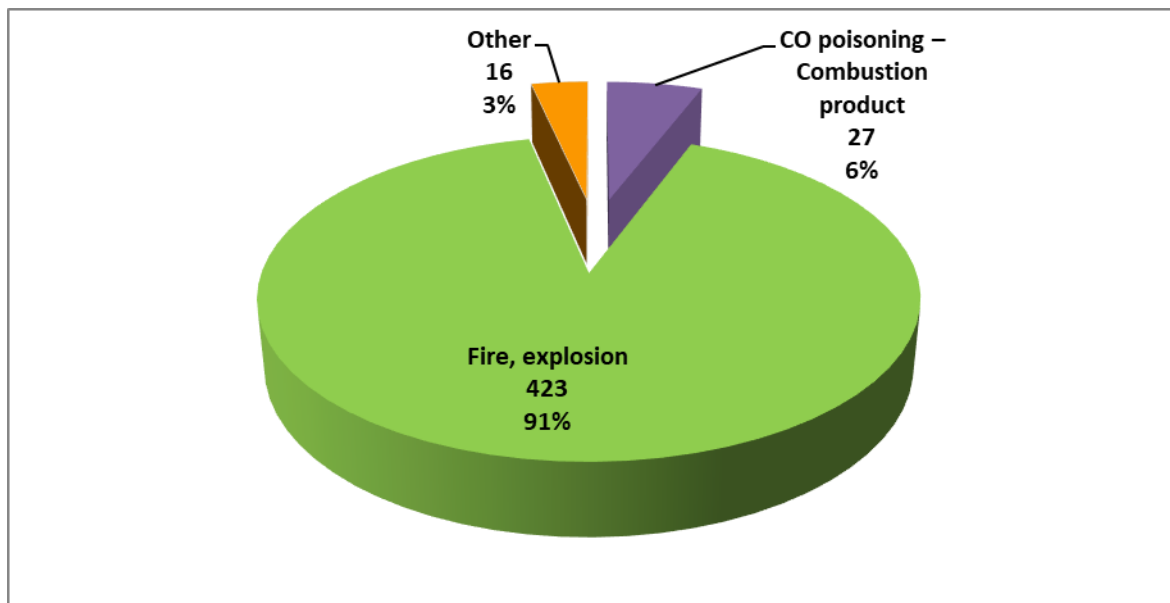
GRAPH 1.4b Australia & New Zealand LPG accidents trend
(Exclusive of NZ cabinet heater appliances)

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



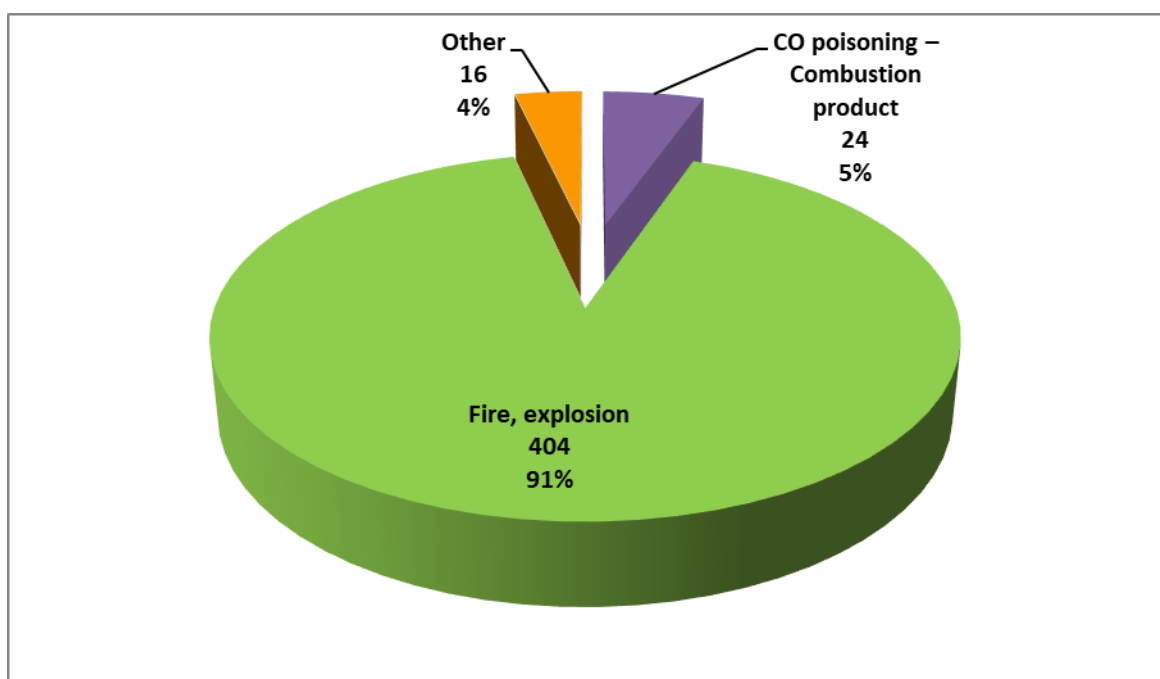
GRAPH 1.5a Australia & New Zealand LPG accidents
(Inclusive of NZ cabinet heater appliances)

➤ *By accident type*



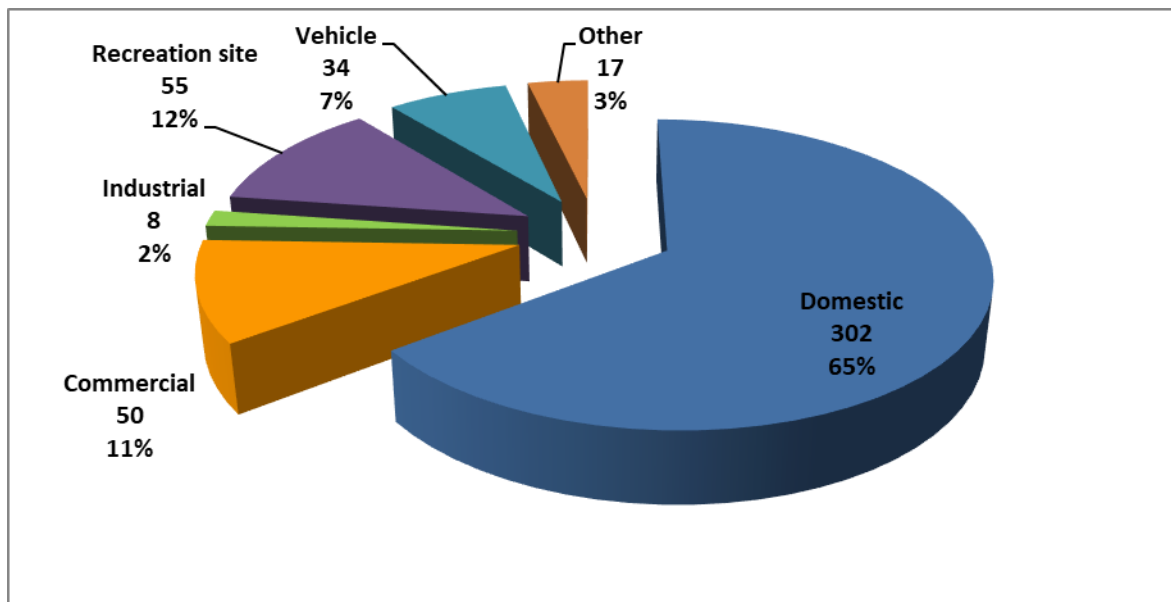
GRAPH 1.5b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

➤ *By accident type*



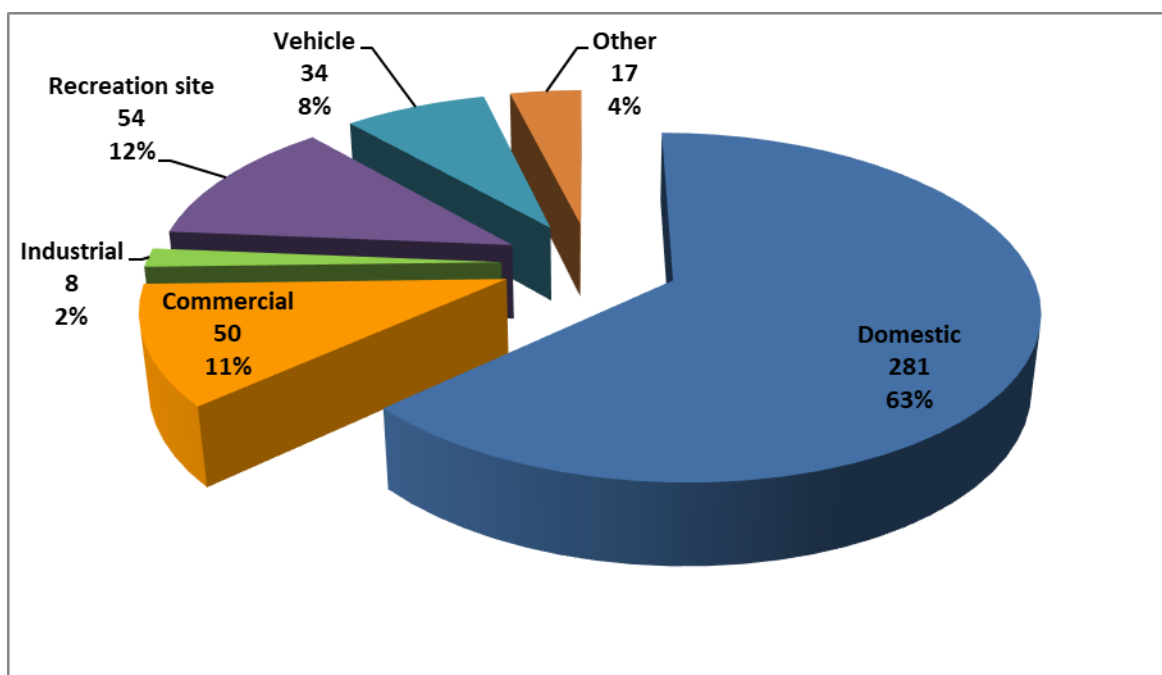
GRAPH 1.6a Australia & New Zealand LPG accidents
(Inclusive of NZ cabinet heater appliances)

➤ *By equipment site (environment)*



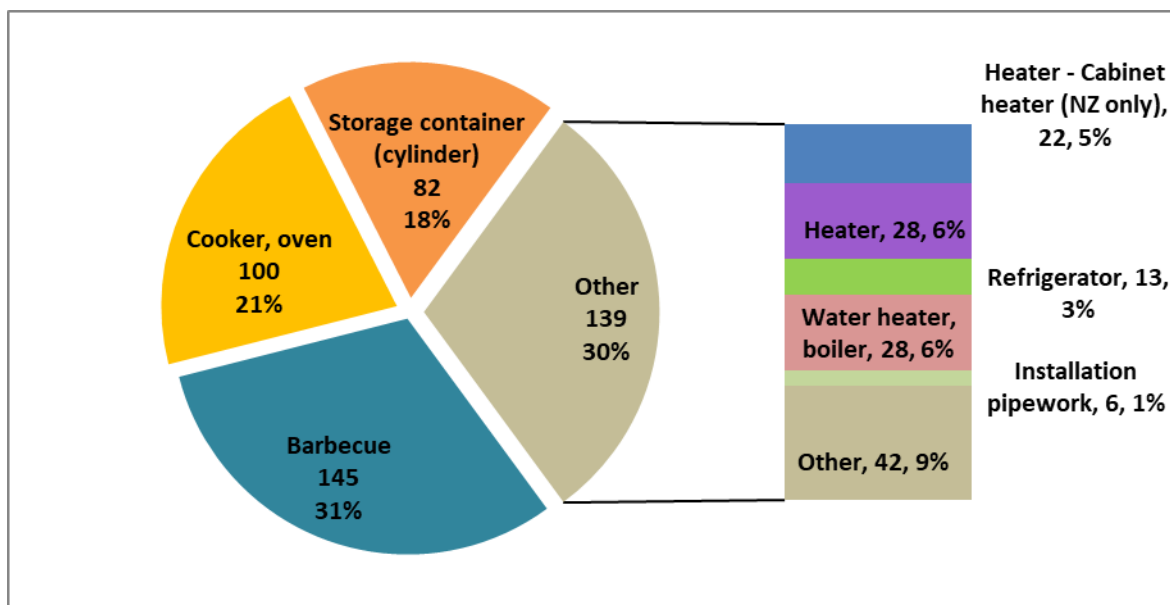
GRAPH 1.6b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

➤ *By equipment site (environment)*



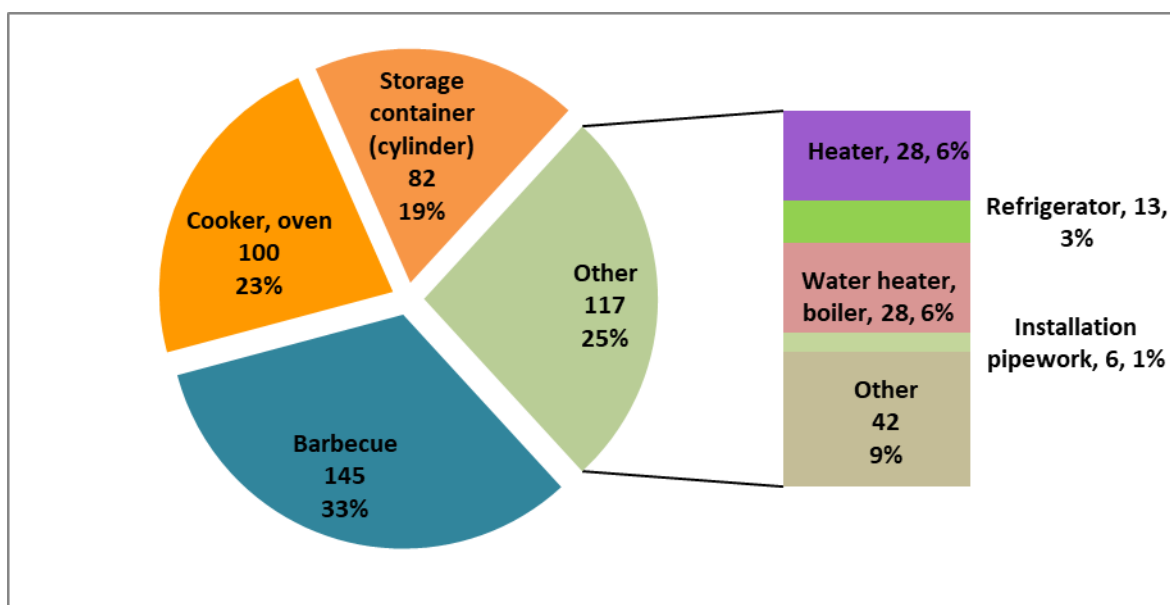
GRAPH 1.7a Australia & New Zealand LPG accidents
(Inclusive of NZ cabinet heater appliances)

➤ **By equipment**



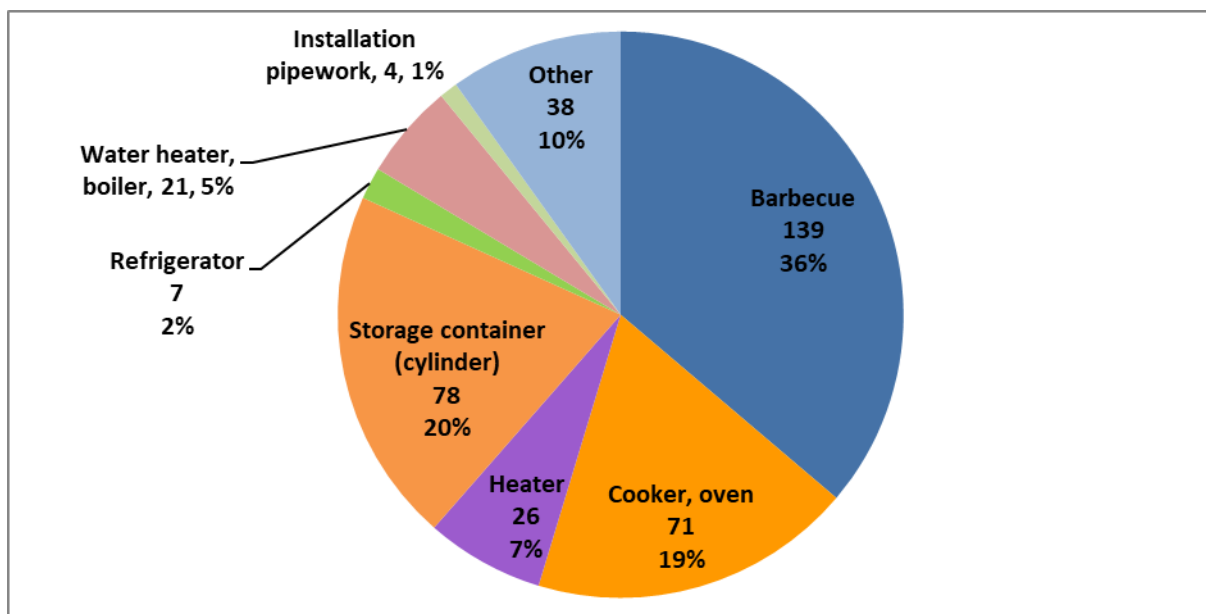
GRAPH 1.7b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

➤ **By equipment**



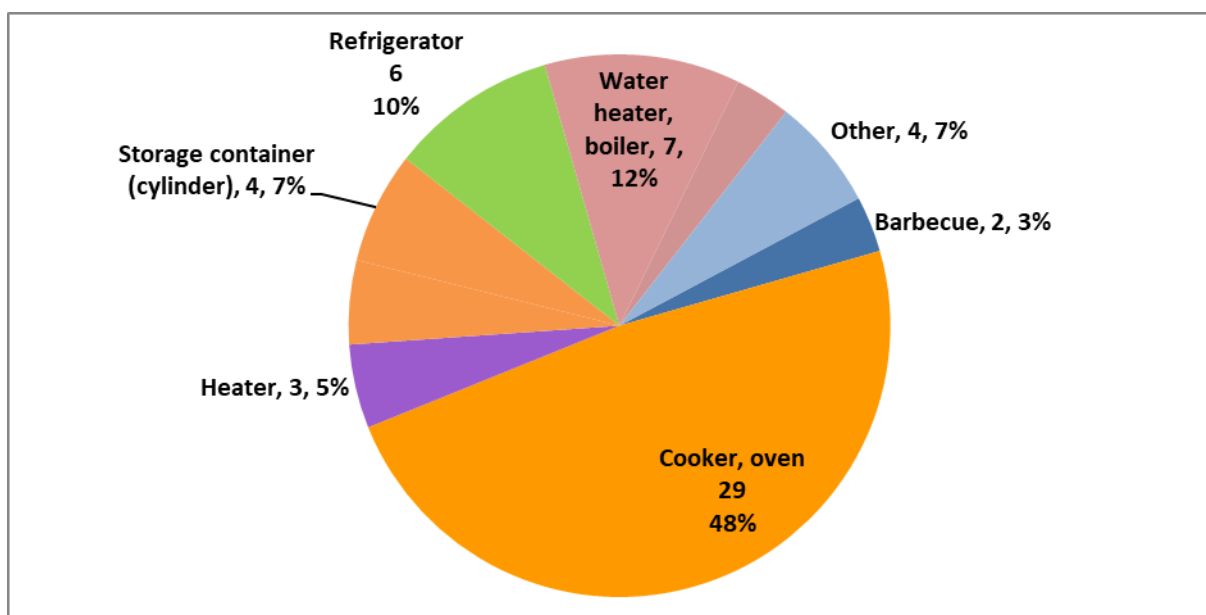
GRAPH 1.7b (i) Australia & New Zealand LPG accidents
Australia

➤ **By equipment**



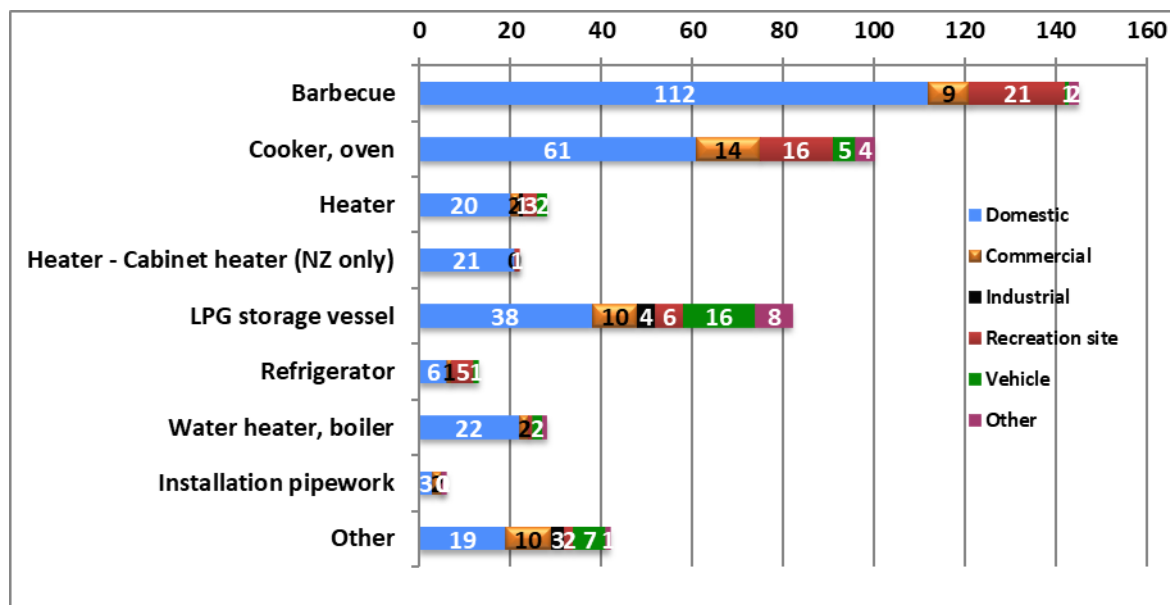
GRAPH 1.7b (ii) Australia & New Zealand LPG accidents
New Zealand (Exclusive of cabinet heater appliances)

➤ **By equipment**



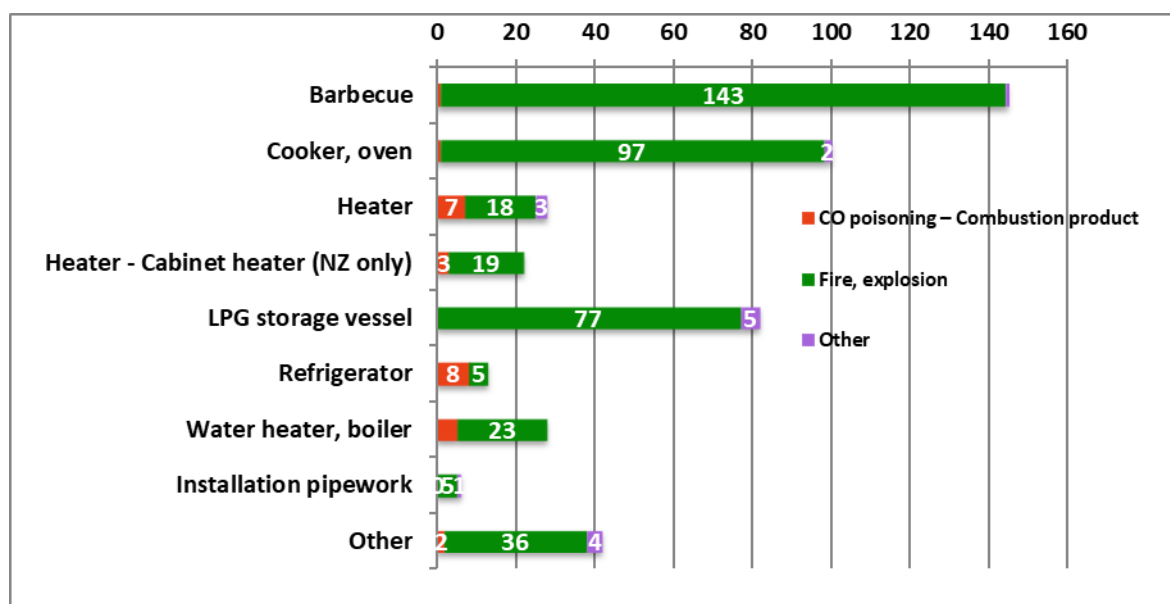
GRAPH 1.8 Australia & New Zealand LPG accidents

➤ *By equipment & its site (environment)*



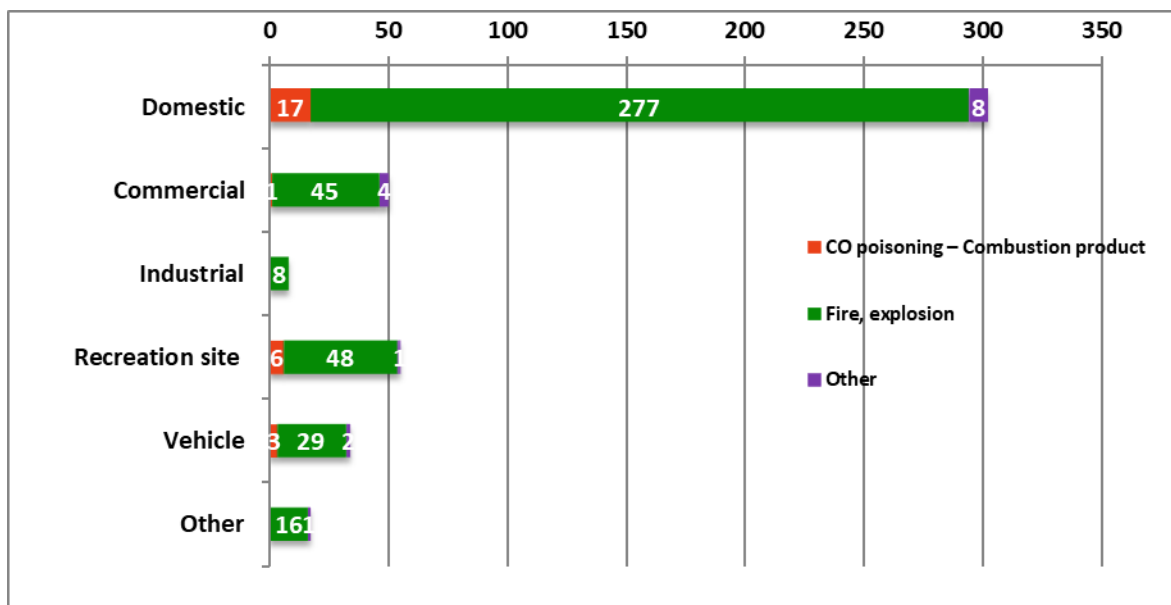
GRAPH 1.9 Australia & New Zealand LPG accidents

➤ *By equipment & accident type*



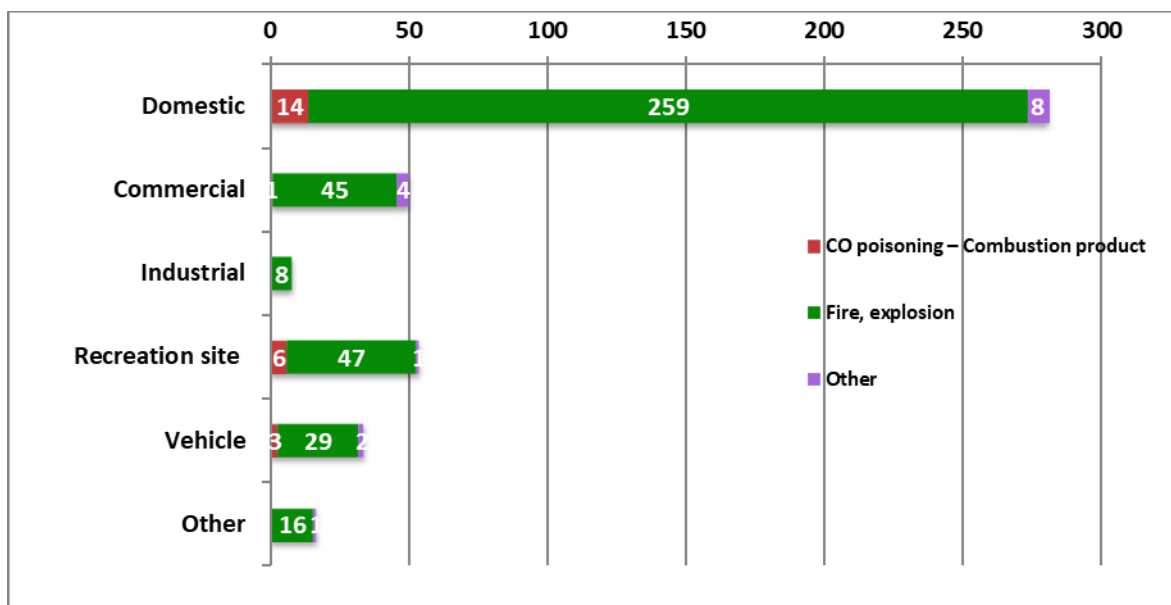
GRAPH 1.10a Australia & New Zealand LPG accidents
(Inclusive of NZ cabinet heater appliances)

➤ *By equipment site (environment) & accident type*



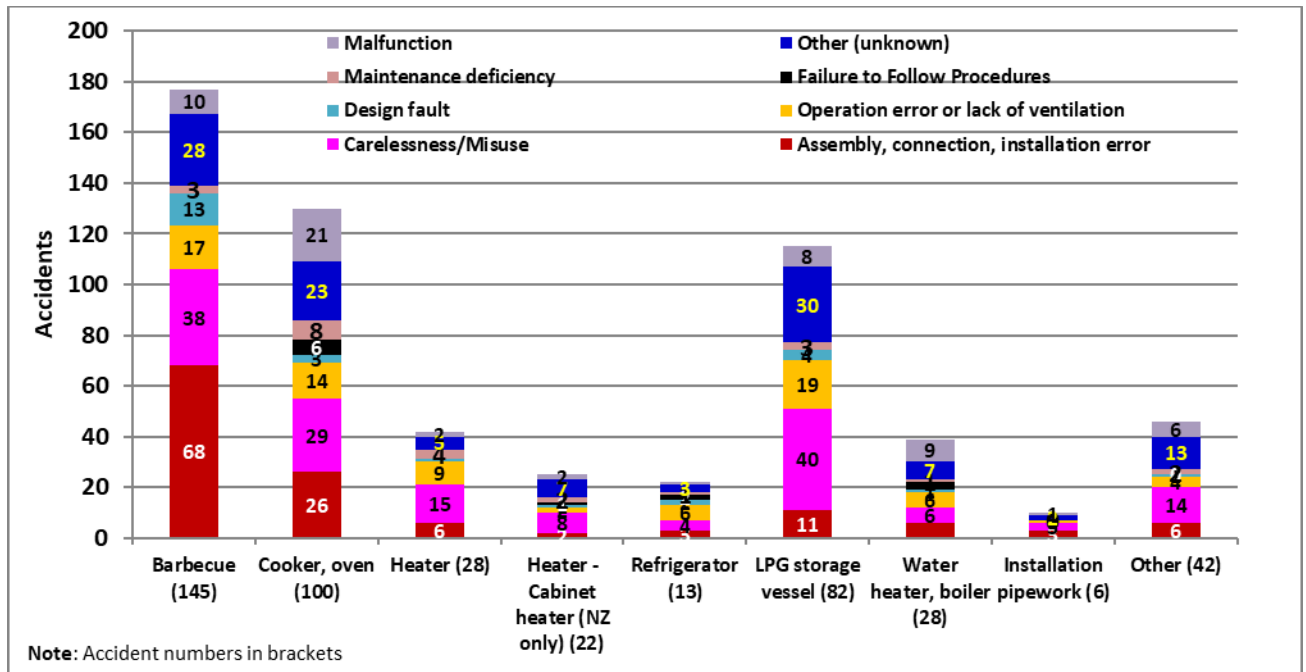
GRAPH 1.10b Australia & New Zealand LPG accidents
(Exclusive of NZ cabinet heater appliances)

➤ *By equipment site (environment) & accident type*



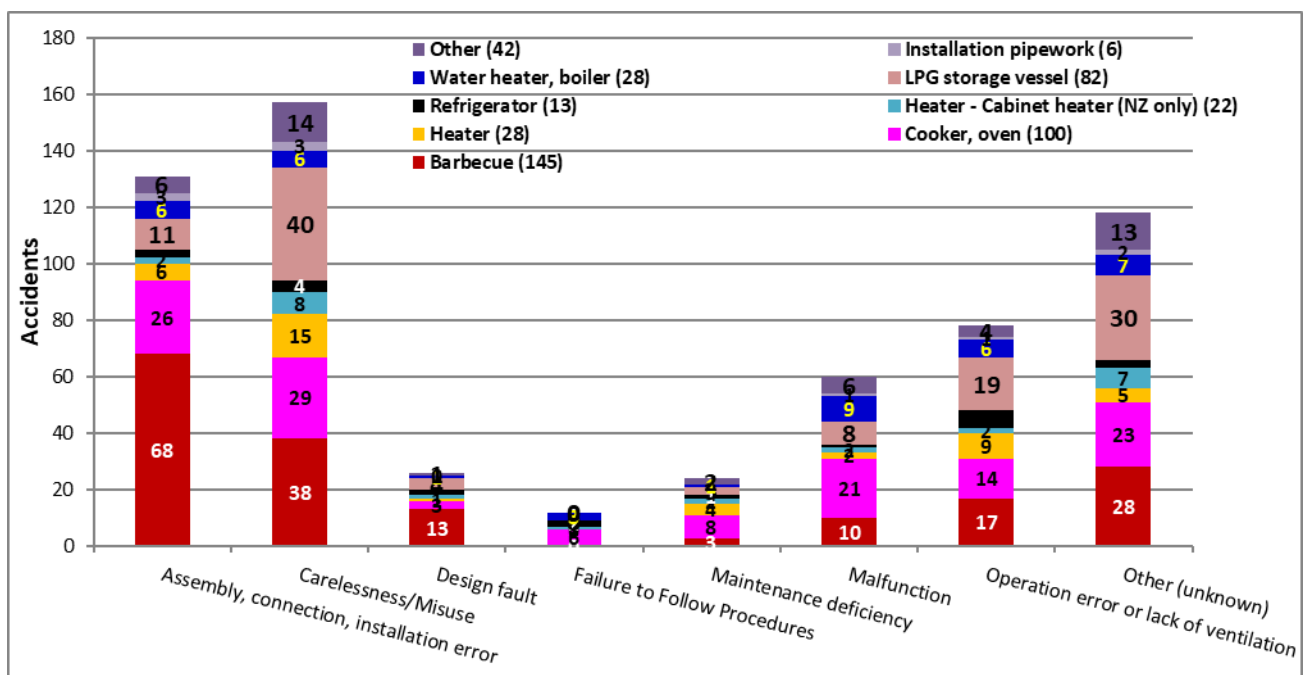
GRAPH 1.11a Australia & New Zealand LPG accidents

➤ *By equipment & causal factors*



GRAPH 1.11b Australia & New Zealand LPG accidents

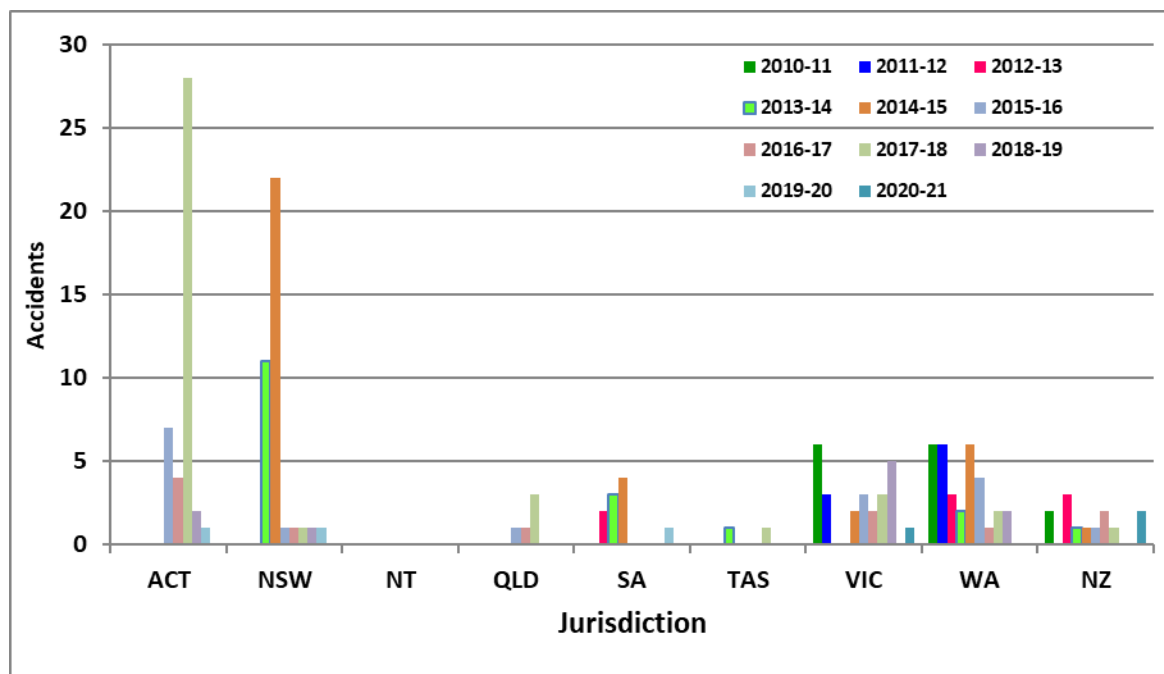
➤ *By equipment & causal factors*



2- Natural Gas (NG) serious accidents

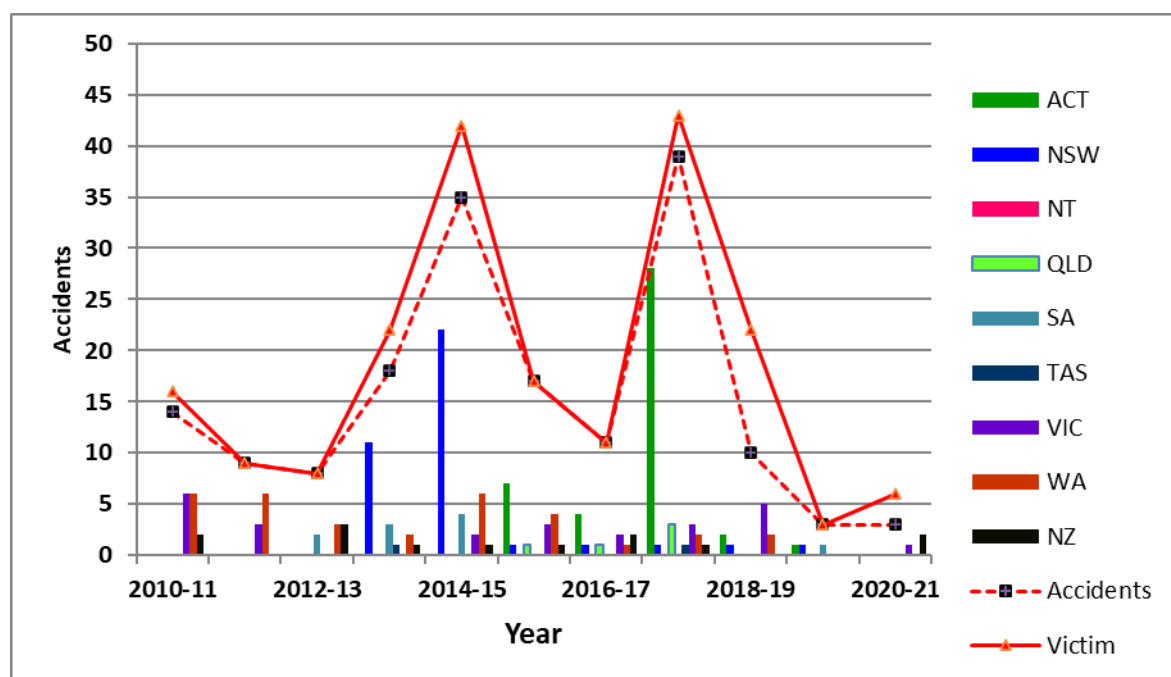
GRAPH 2.1 Australia & New Zealand NG accidents

➤ *By state/country*



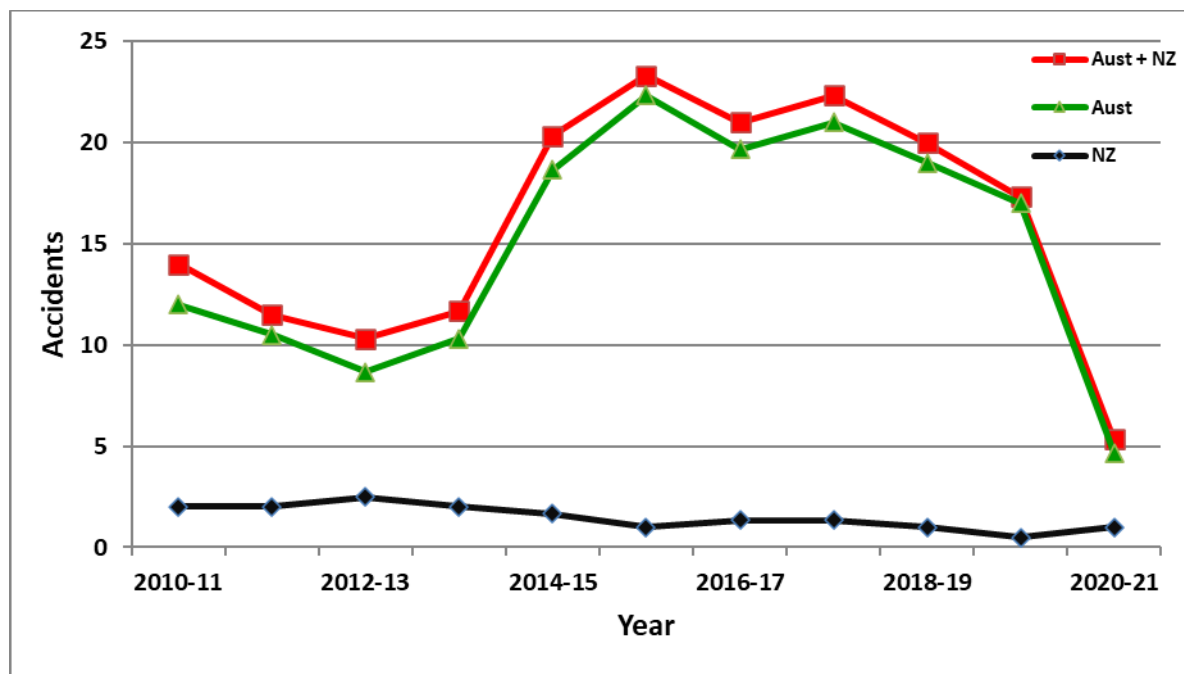
GRAPH 2.2 Australia & New Zealand NG accidents

➤ *By year*



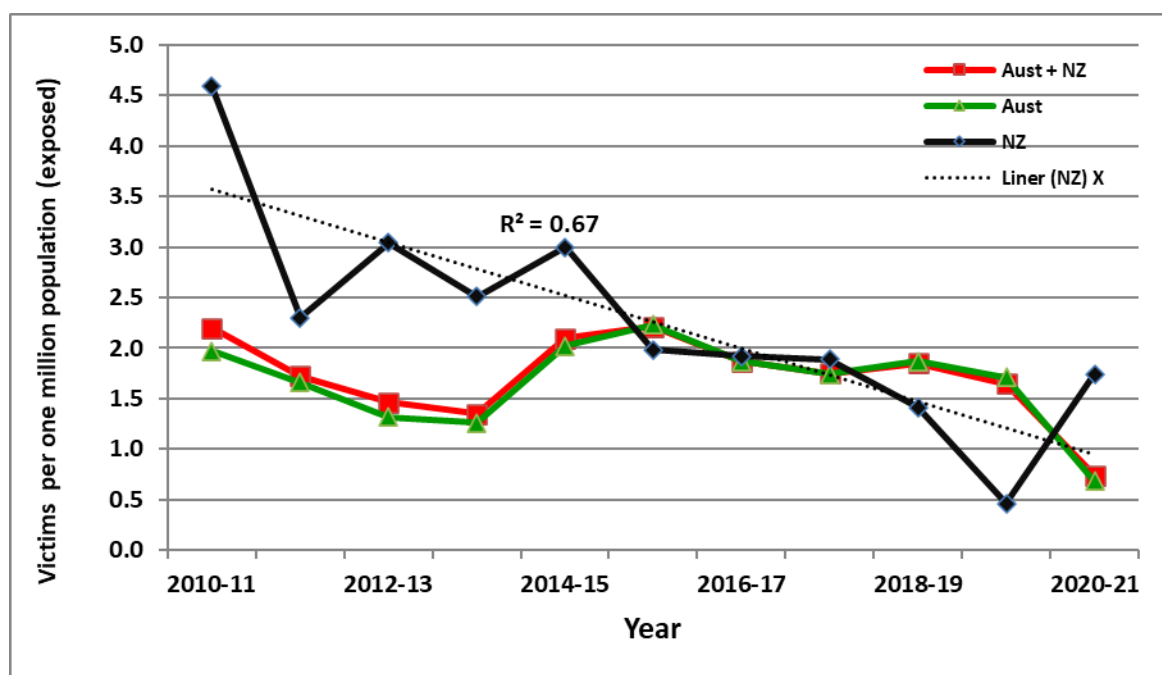
GRAPH 2.3 Australia & New Zealand NG accidents

➤ *By country (three-year running average)*



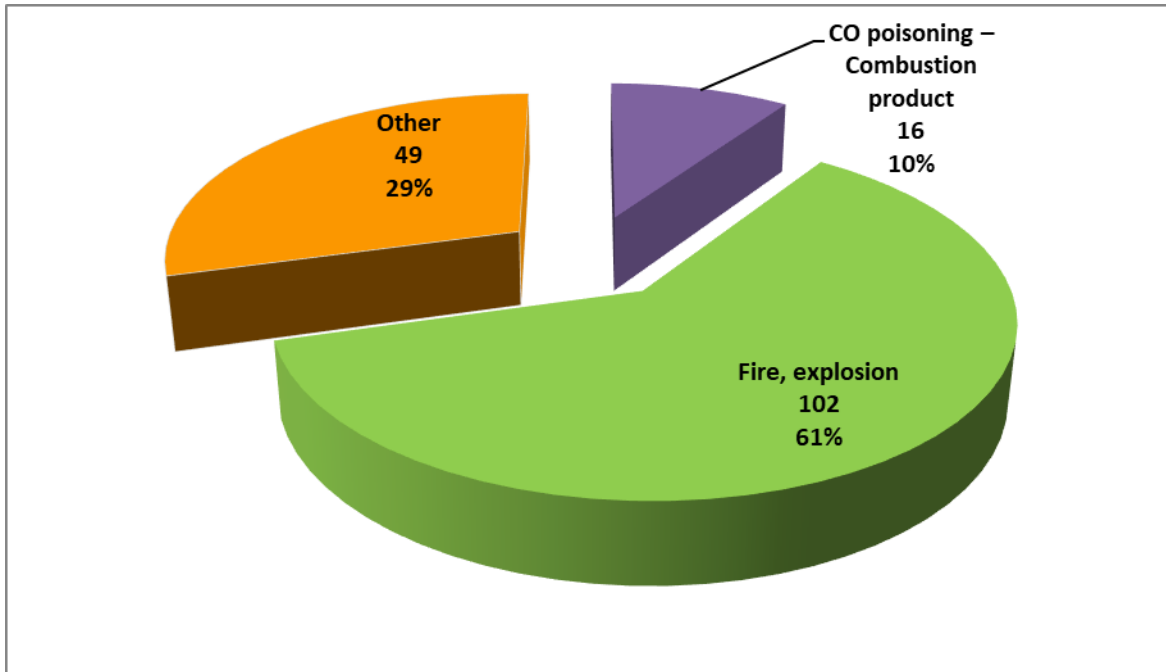
GRAPH 2.4 Australia & New Zealand NG accidents

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



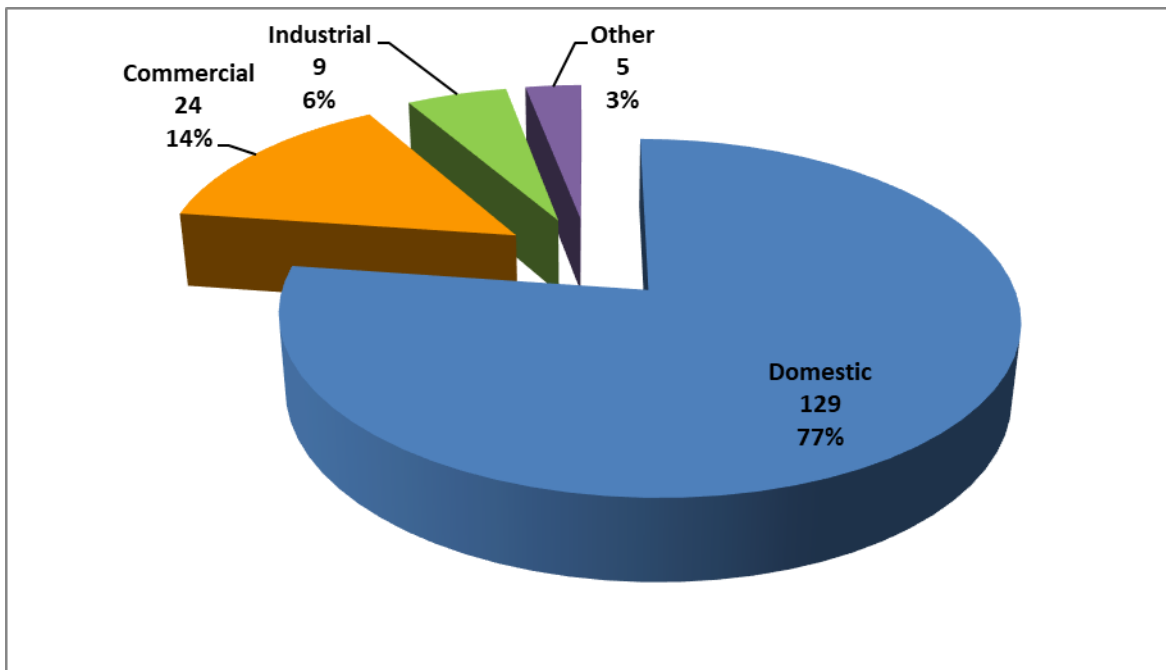
GRAPH 2.5 Australia & New Zealand NG accidents

➤ *By accident type*



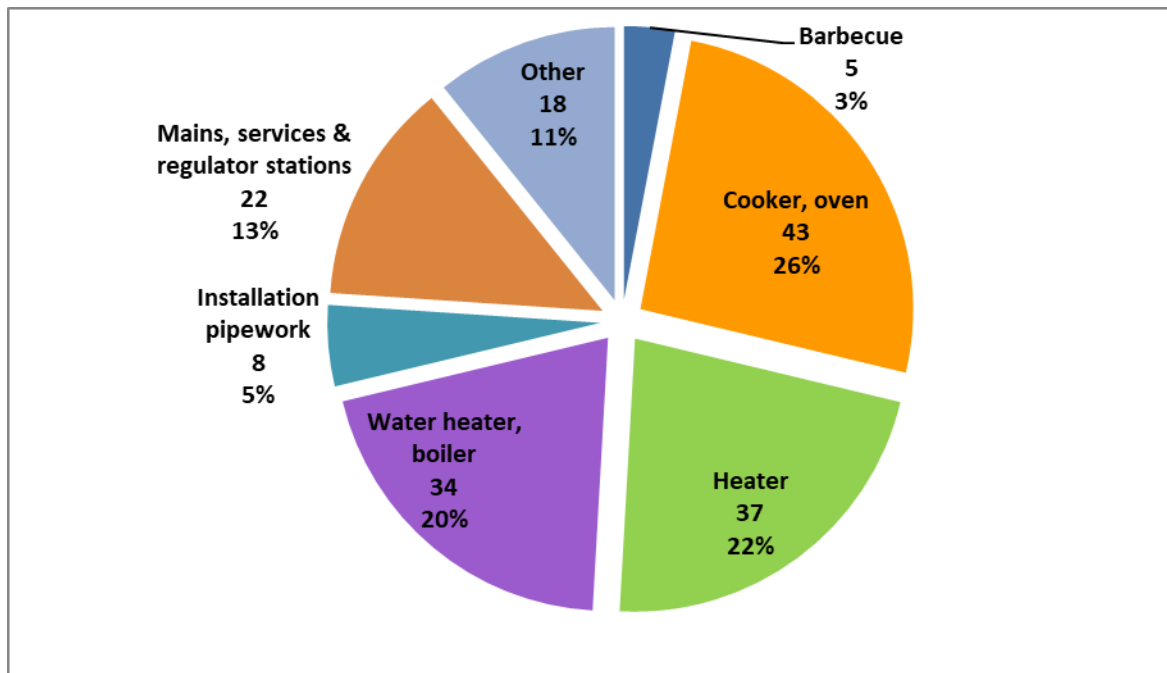
GRAPH 2.6 Australia & New Zealand NG accidents

➤ *By equipment site (environment)*



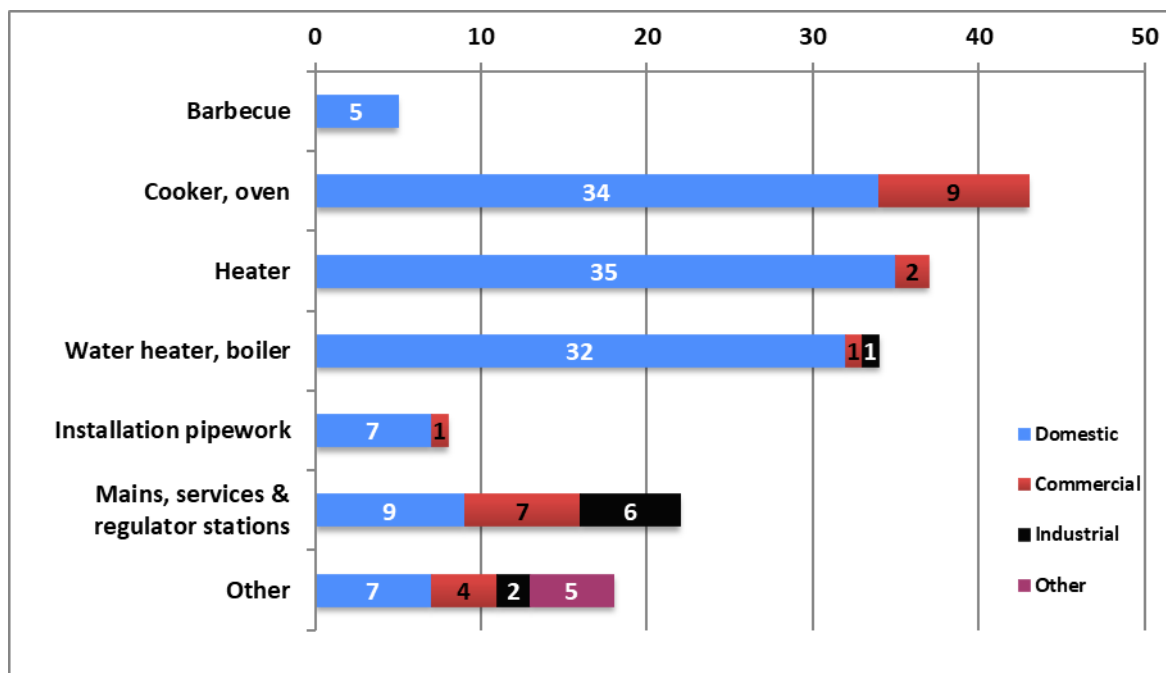
GRAPH 2.7 Australia & New Zealand NG accidents

➤ *By equipment*



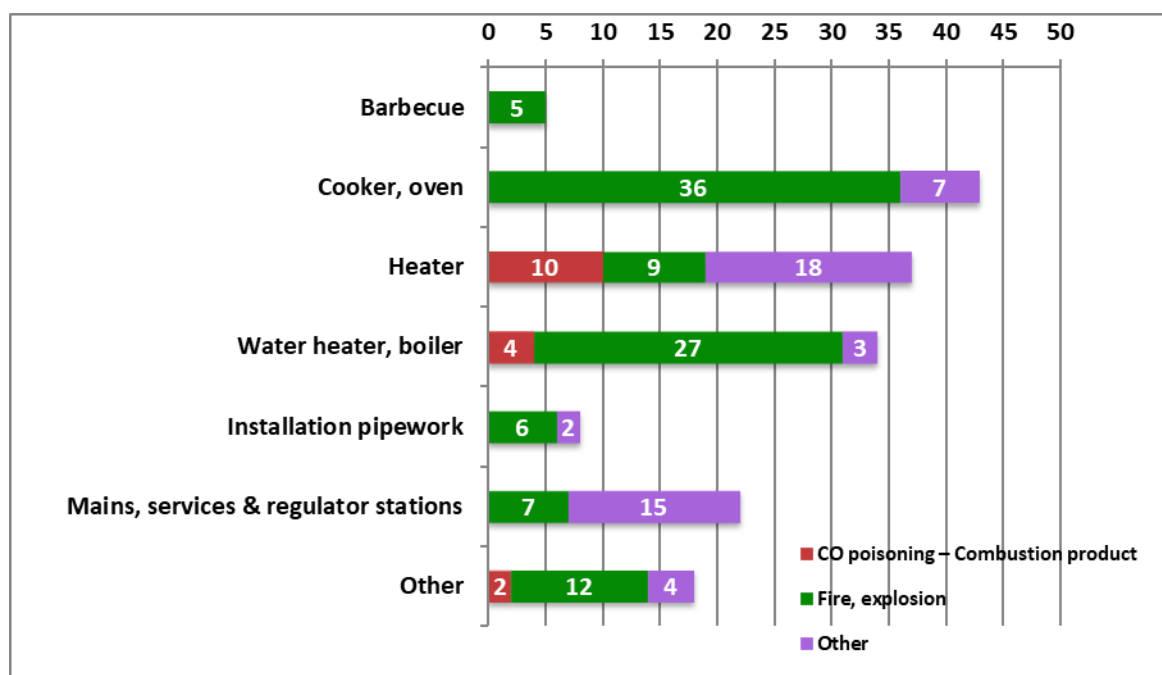
GRAPH 2.8 Australia & New Zealand NG accidents

➤ *By equipment & its site (environment)*



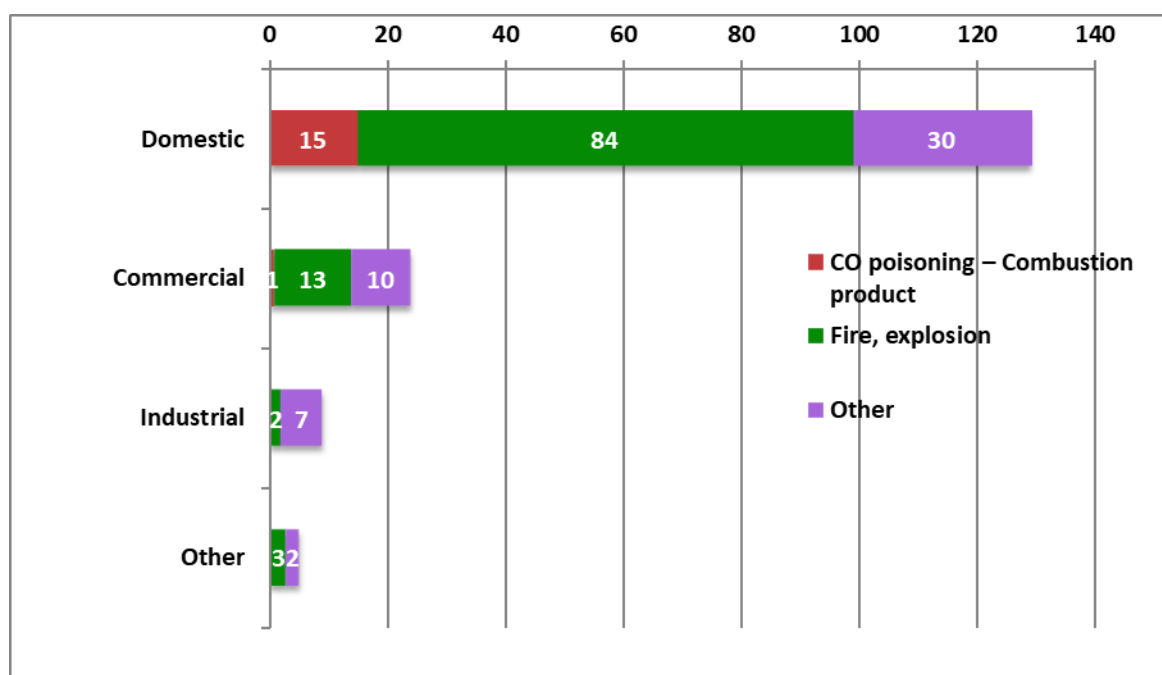
GRAPH 2.9 Australia & New Zealand NG accidents

➤ *By equipment & accident type*



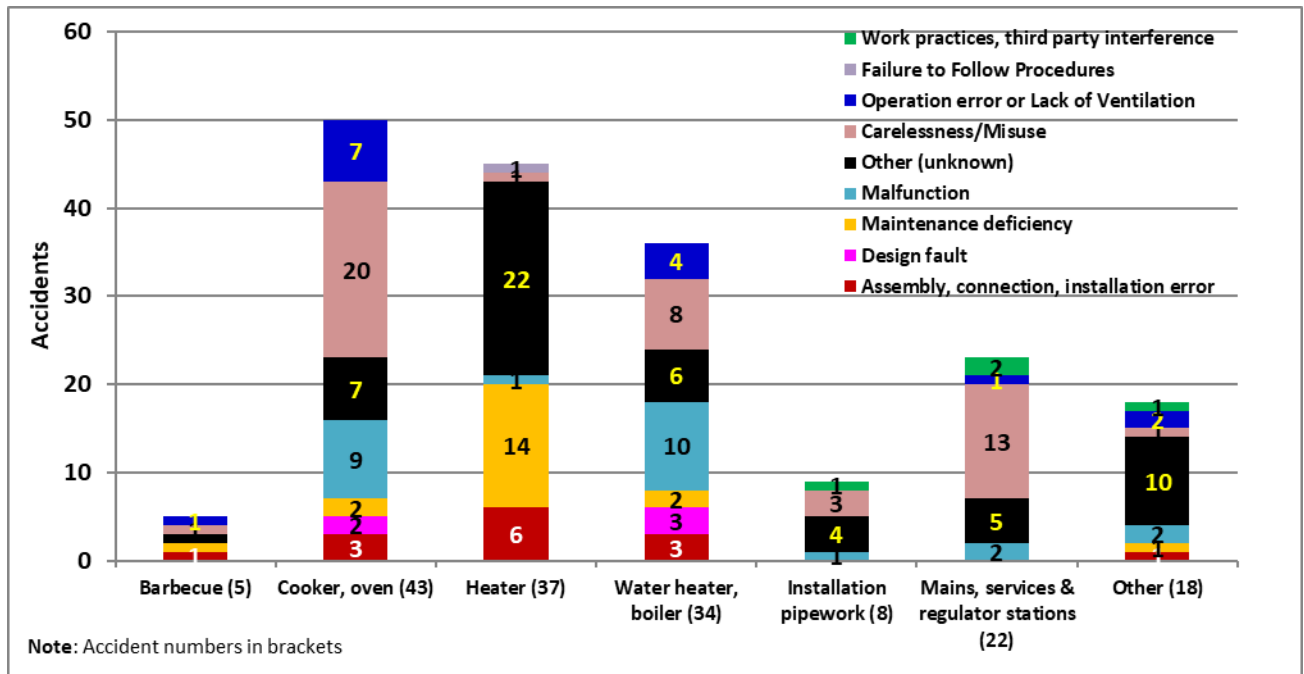
GRAPH 2.10 Australia & New Zealand NG accidents

➤ *By equipment site (environment) & accident type*



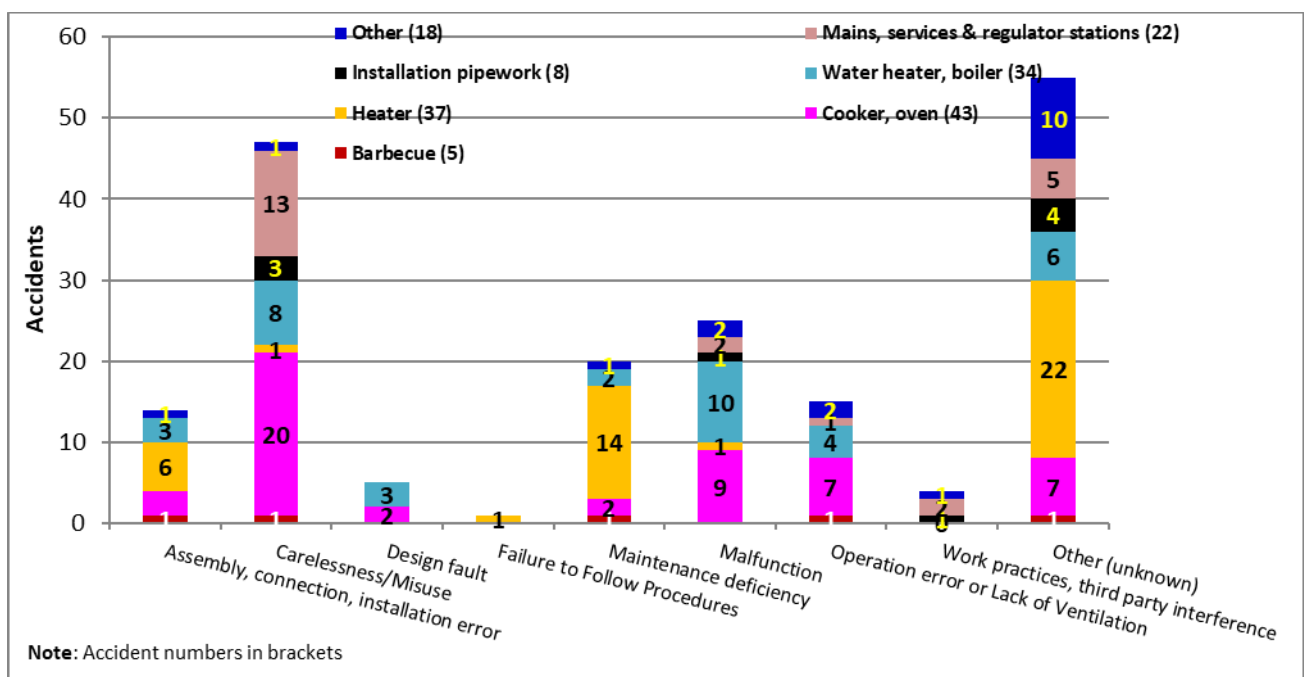
GRAPH 2.11a Australia & New Zealand NG accidents

➤ *By equipment & causal factors*



GRAPH 2.11b Australia & New Zealand NG accidents

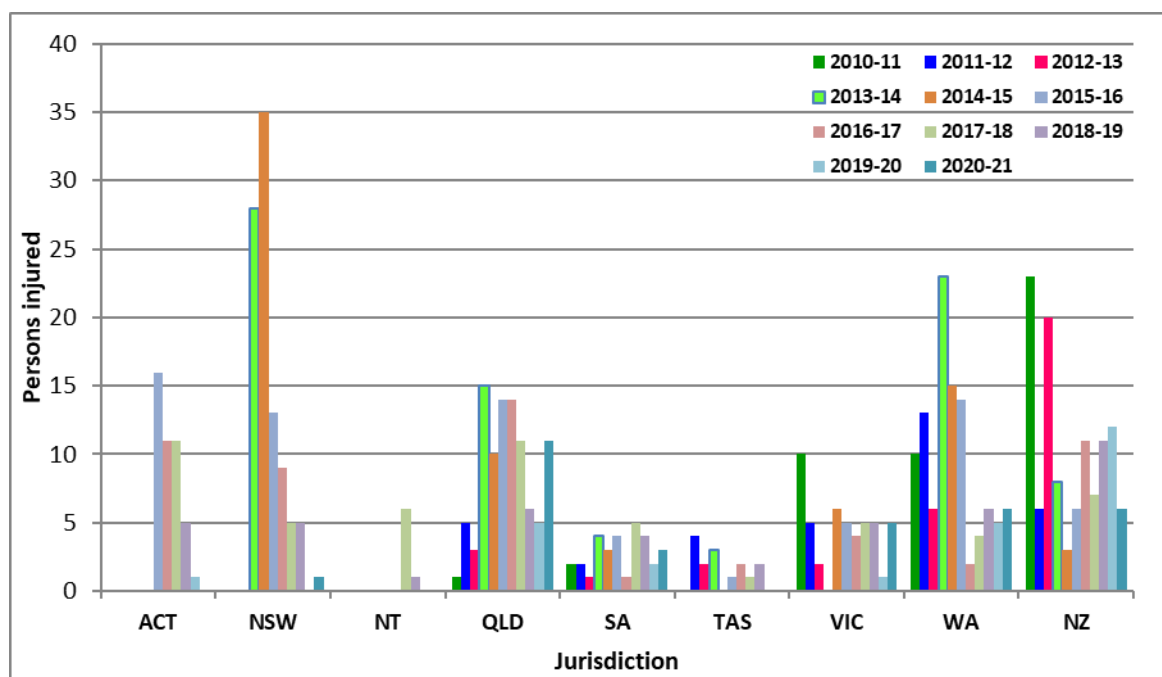
By equipment & causal factors



3- Gas injuries

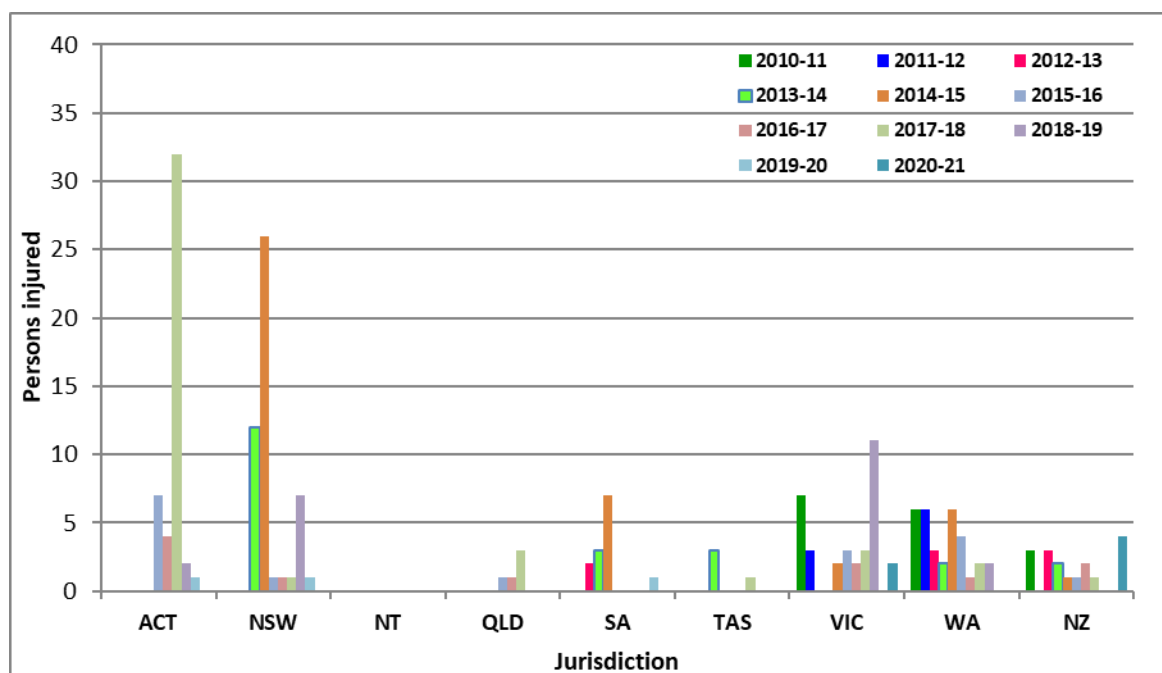
**GRAPH 3.1a Australia & New Zealand gas injuries
(LPG)**

➤ *By state/country*



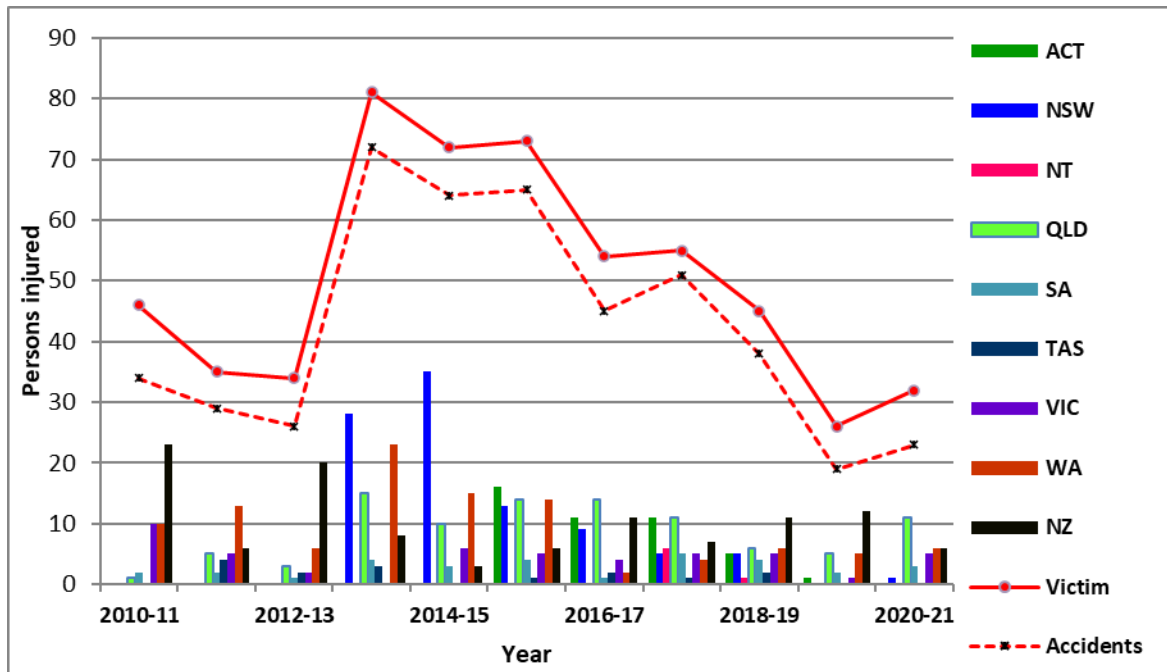
**GRAPH 3.1b Australia & New Zealand gas injuries
(NG)**

➤ *By state/country*



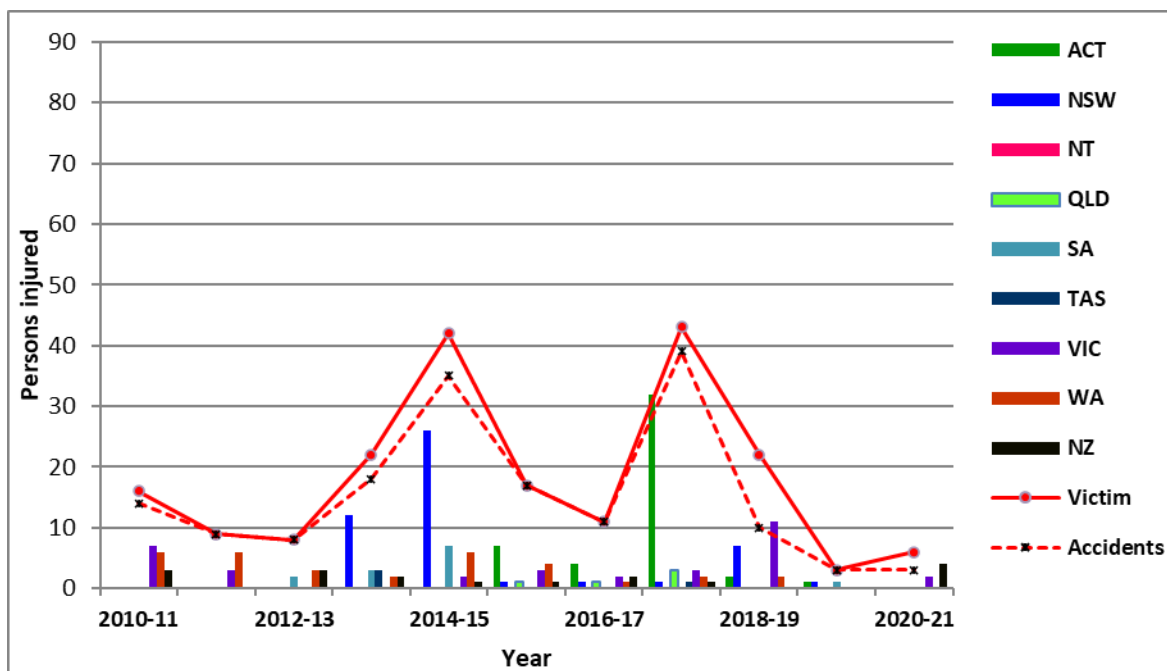
**GRAPH 3.2a Australia & New Zealand gas injuries
(LPG)**

➤ **By year**



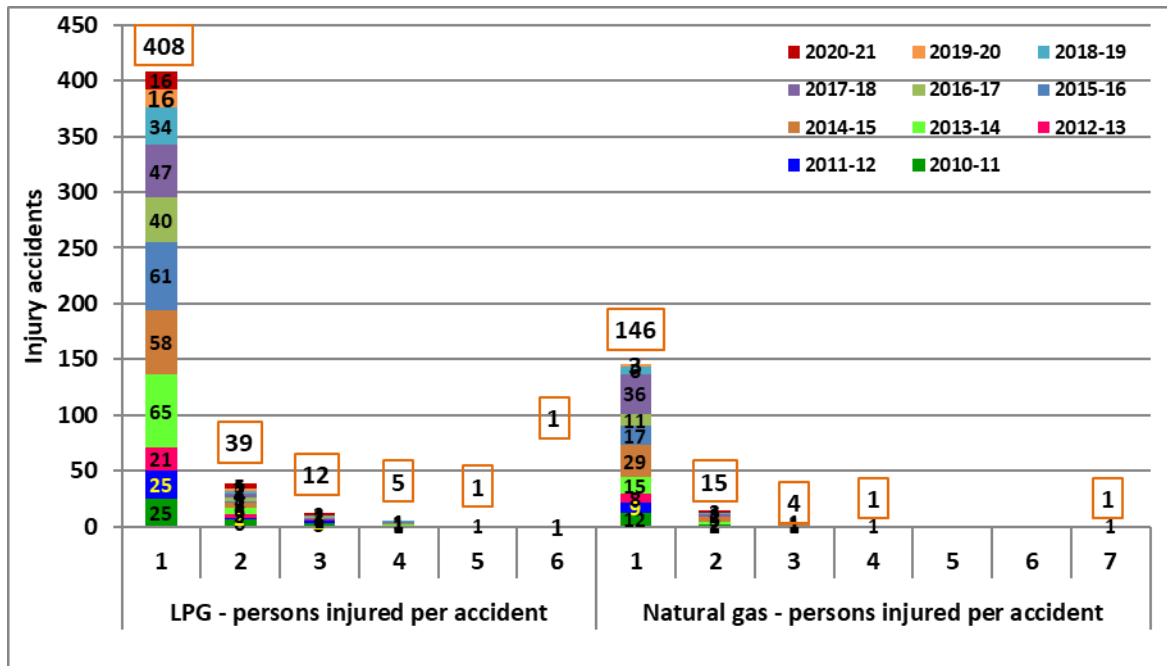
**GRAPH 3.2a Australia & New Zealand gas injuries
(NG)**

➤ **By year**



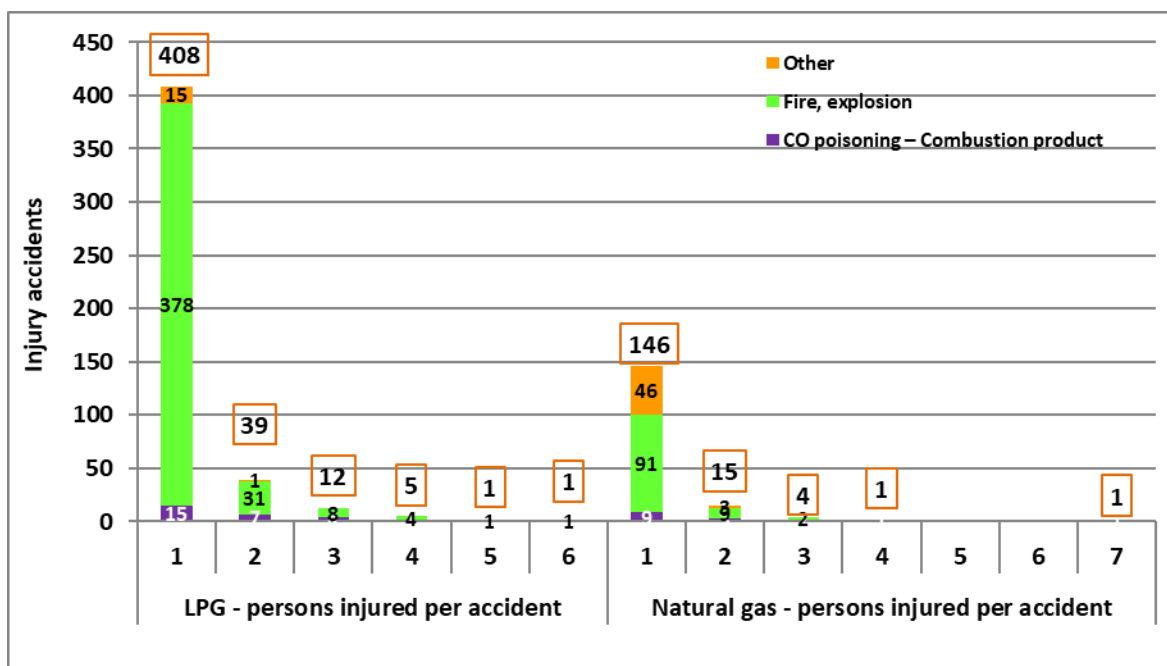
GRAPH 3.3 Australia & New Zealand gas injuries

➤ *By consequence (injuries per accident)*



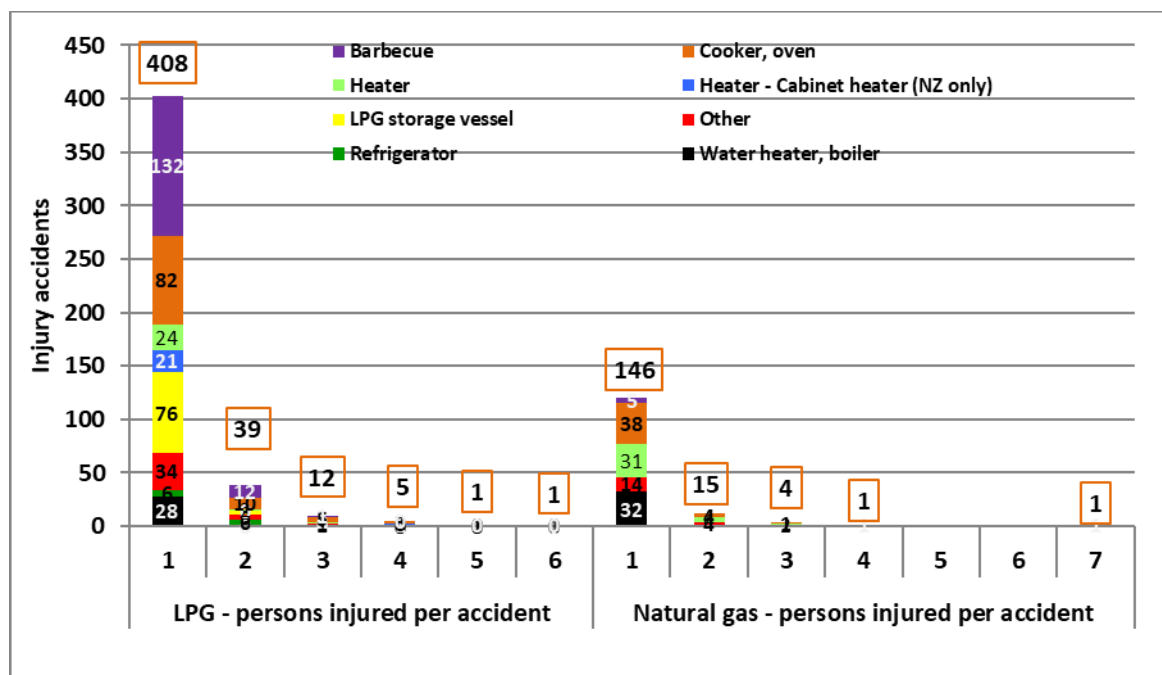
GRAPH 3.4 Australia & New Zealand gas injuries

➤ *By consequence (injuries per accident) & accident type*



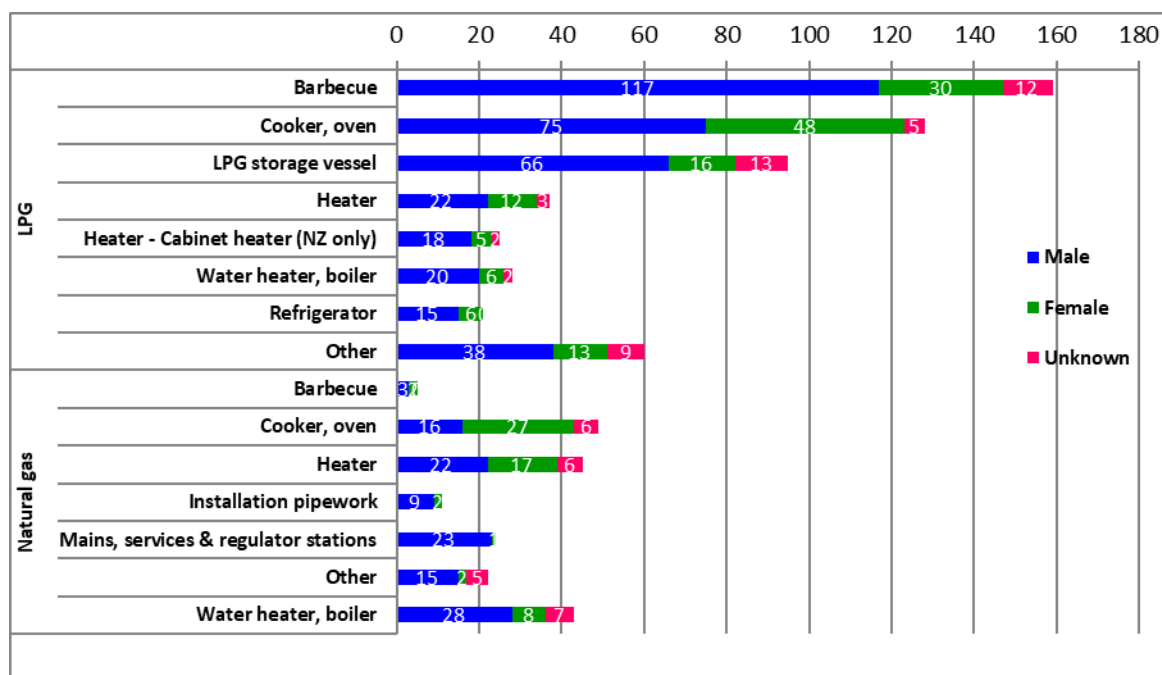
GRAPH 3.5 Australia & New Zealand gas injuries

➤ *By consequence (injuries per accident) & equipment type*



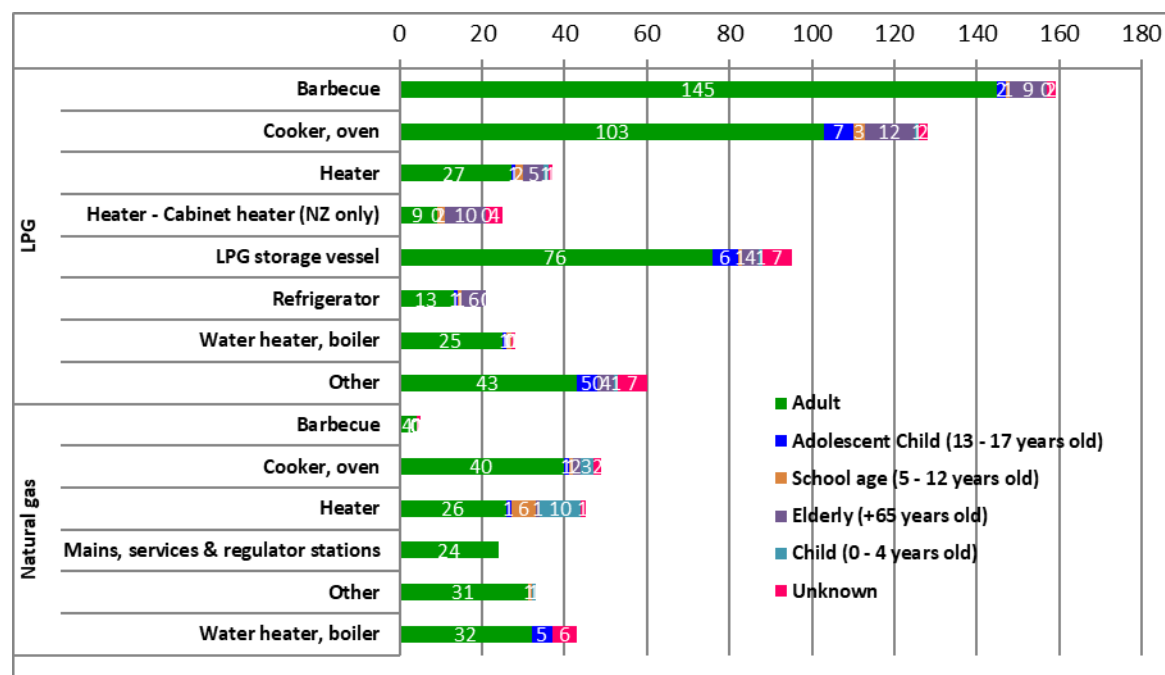
GRAPH 3.6 Australia & New Zealand gas injuries

➤ *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	0	4	5	19	4	23
Total	41	88	6	83	27	13	40	86	384	82	466

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	0	5	6	26	6	32
Total	44	96	7	95	31	15	48	104	440	113	553

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							1		1	2	3
Total	42	38	0	6	9	2	25	32	154	13	167

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							2		2	4	6
Total	46	49	0	5	13	4	33	32	182	17	199