

# **Serious Gas Accident Data Report**

**Australia & New Zealand Financial Years  
2010 – 2023**

## **This report covers:**

- Definitions & classifications
- Summary of the 2022-2023 year
- Series of graphs & tables for data supplied covering the period 1 July 2010 to 30 June 2023
  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

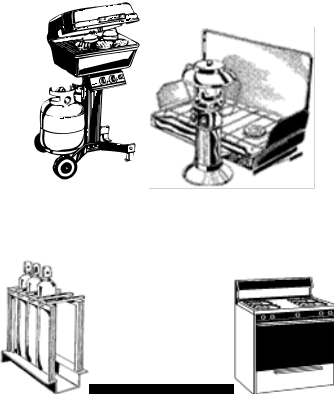
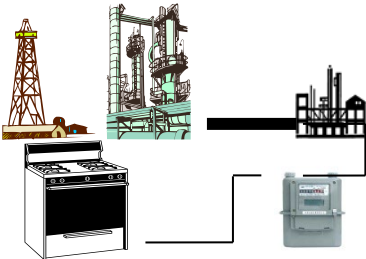
Mains, services & regulator stations  
Refrigerator  
Storage vessel  
Vaporiser  
Water heater – Storage  
Water heater – Instantaneous  
Water heater – Boiler  
Water heater – Other  
Decorative log effect appliances  
Commercial catering equipment  
Type B (eg stationary engines, kilns, furnaces)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

# Summary of 2022-23

## Serious gas accidents

This page covers the 12-month period from 1 July 2022 to 30 June 2023. 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;"><b>LPG (2022-23 only)</b></p> <ul style="list-style-type: none"><li>• Total 26 LPG accidents caused casualties (includes two fatalities) to 29 people</li><li>• Barbecues were involved in 31% (8) and, cookers (or ovens) were involved in 38% (10) and heater were involved in 8% (2) of accidents</li><li>• 69% (18) of 26 accidents occurred in a domestic or commercial environment</li></ul>
	<p style="text-align: center;"><b>Natural Gas (NG) (2022-23 only)</b></p> <ul style="list-style-type: none"><li>• 12 NG accidents caused casualties to 15 people</li><li>• Cooker and Water heater was involved in 33% (4) each of accidents and, barbecue and heater were involved in 17% (2) each of accidents</li><li>• 10 of accidents occurred in a domestic and two in industrial environment</li></ul>

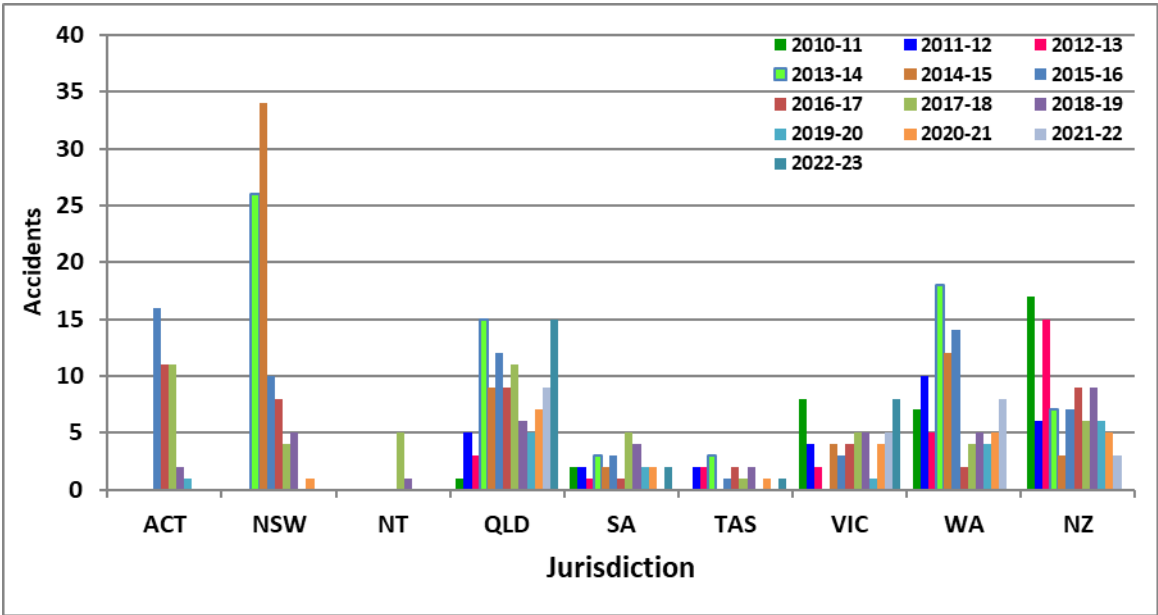
This report presents the information in a series of charts and tables.

The following sections present data supplied in a series of charts and tables for years 2010-2023.

**1- LPG Serious accidents**

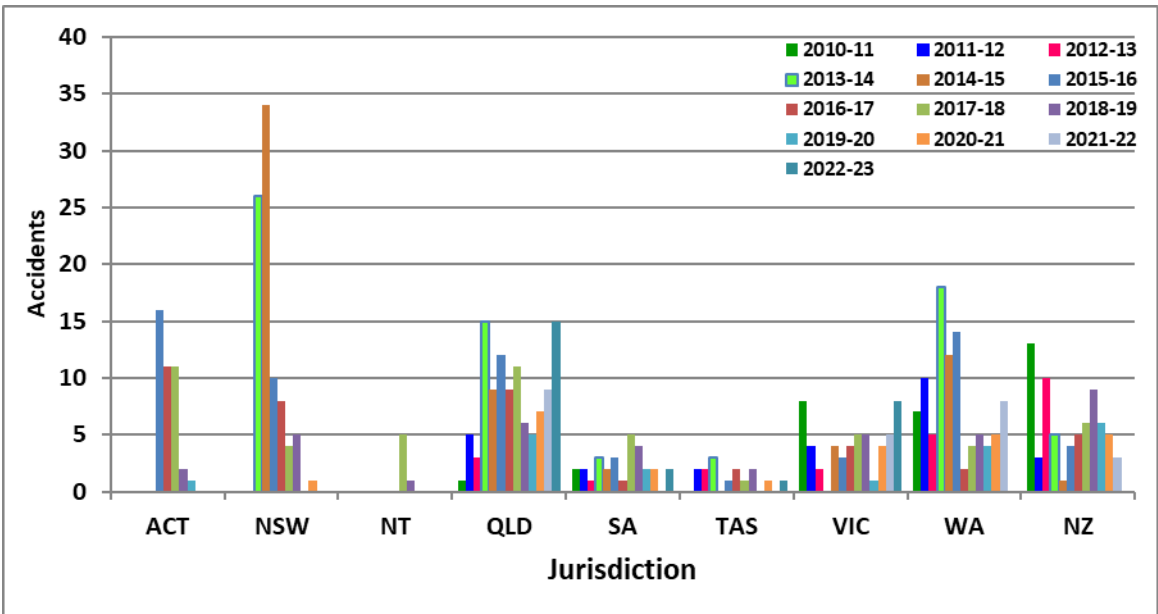
**GRAPH 1.1a Australia & New Zealand (NZ) LPG accidents**  
*(Inclusive of NZ cabinet heater appliances)*

➤ *By state/country*



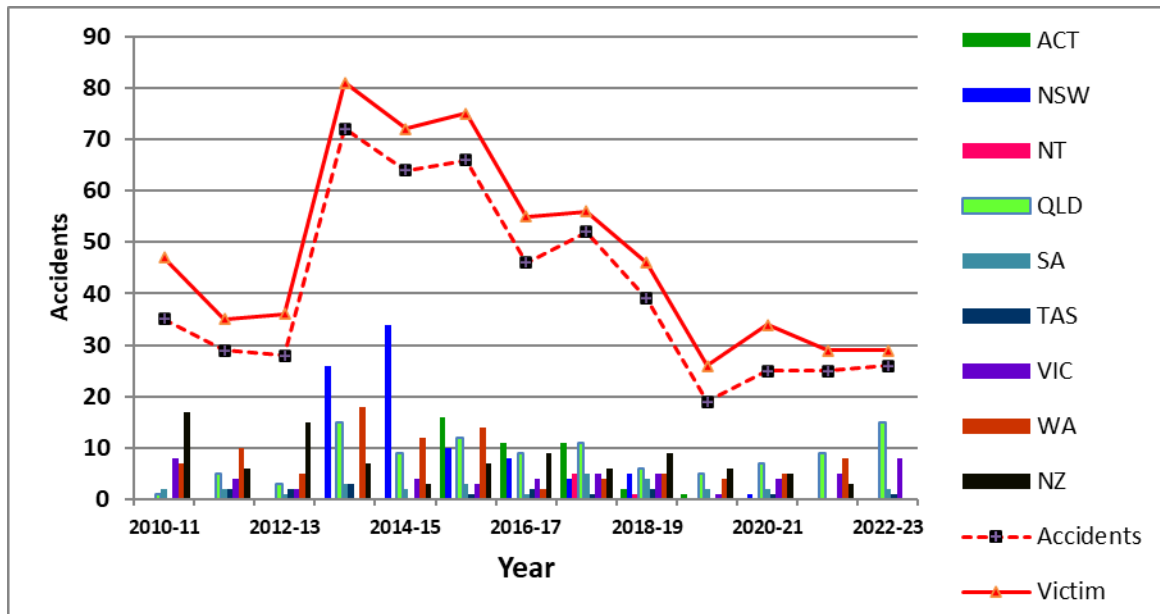
**GRAPH 1.1b Australia & New Zealand LPG accidents**  
*(Exclusive of NZ cabinet heater appliances)*

➤ *By state/country*



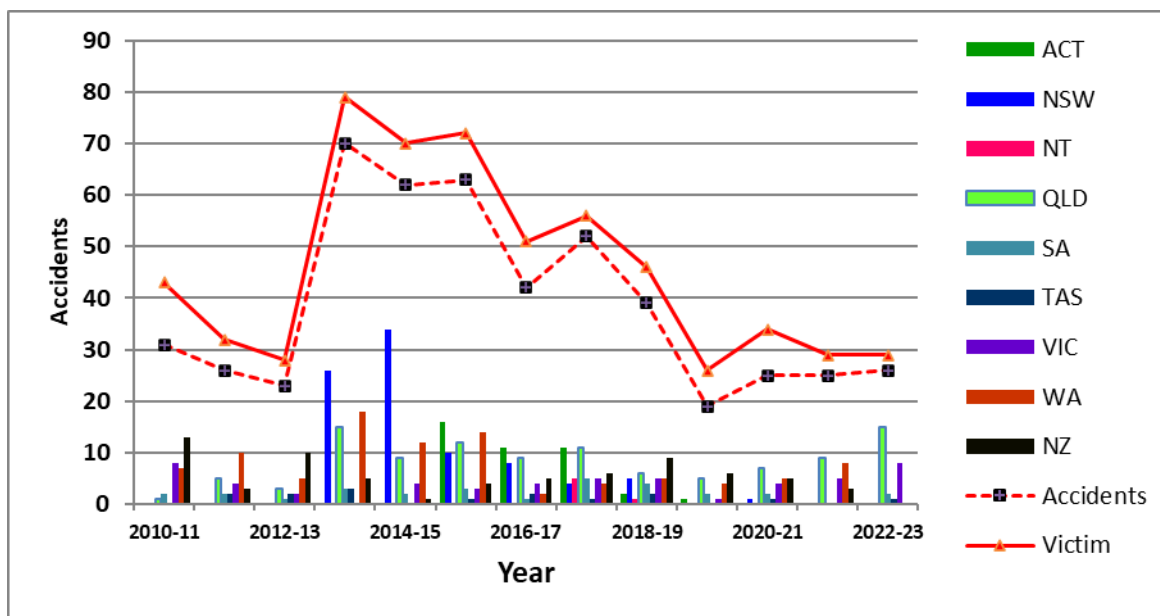
**GRAPH 1.2a Australia & New Zealand LPG accidents**  
*(Inclusive of NZ cabinet heater appliances)*

➤ *By year*



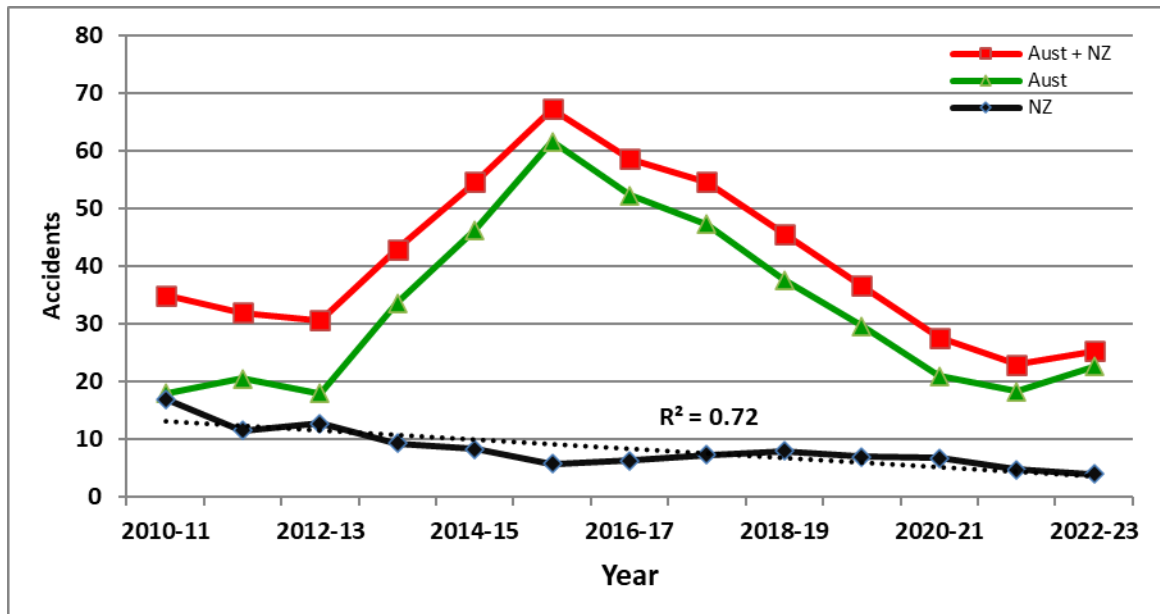
**GRAPH 1.2b Australia & New Zealand LPG accidents**  
*(Exclusive of NZ cabinet heater appliances)*

➤ *By year*



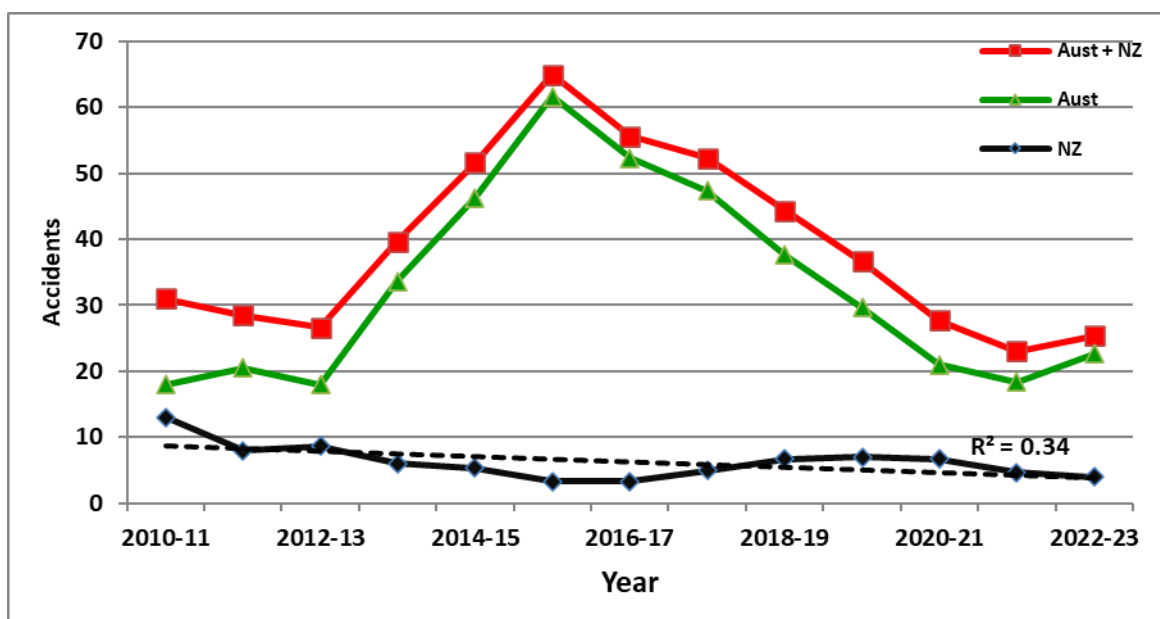
**GRAPH 1.3a Australia & New Zealand LPG accidents**  
*(Inclusive of NZ cabinet heater appliances)*

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



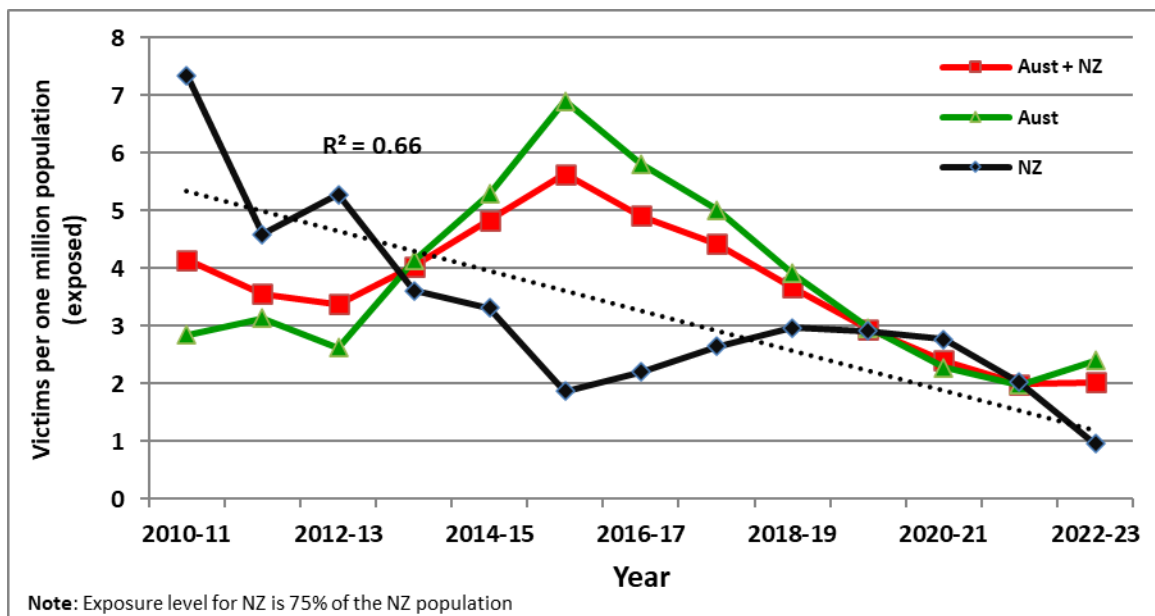
**GRAPH 1.3b Australia & New Zealand LPG accidents**  
*(Exclusive of NZ cabinet heater appliances)*

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



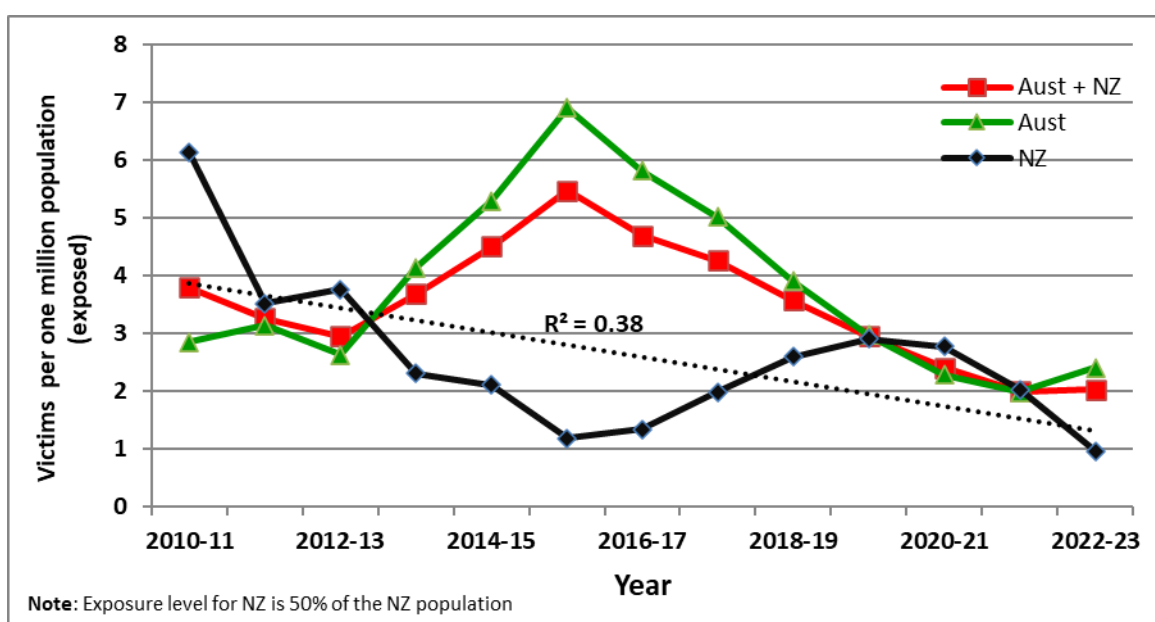
**GRAPH 1.4a Australia & New Zealand LPG accidents trend**  
*(Inclusive of NZ cabinet heater appliances)*

- *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)*

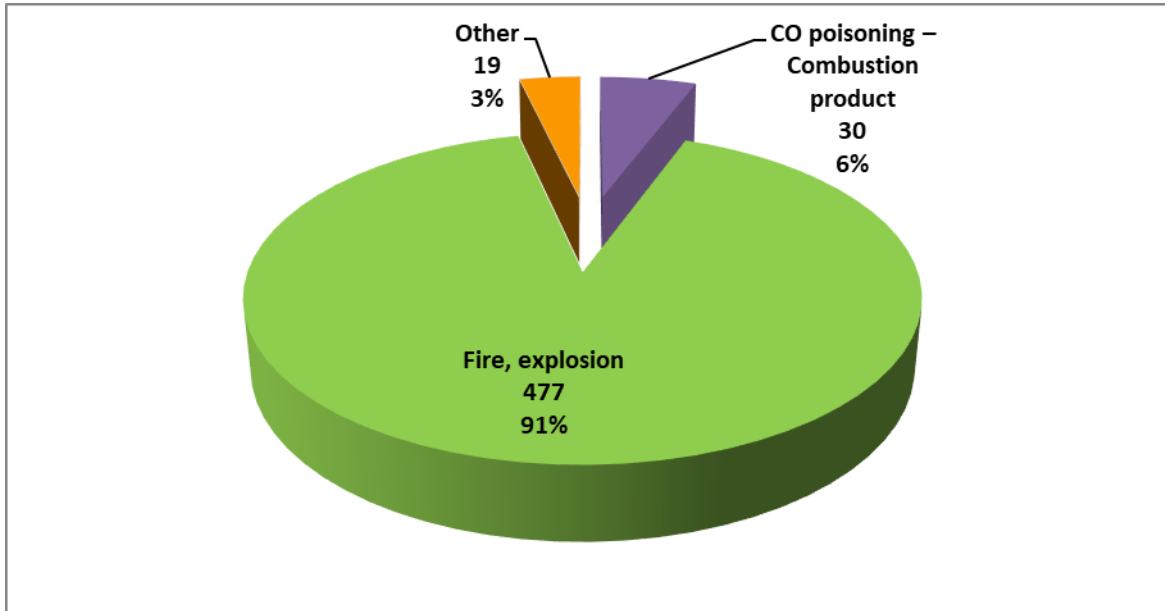
- *By country (three-year running average victims per million population exposed in Australia and New Zealand)*





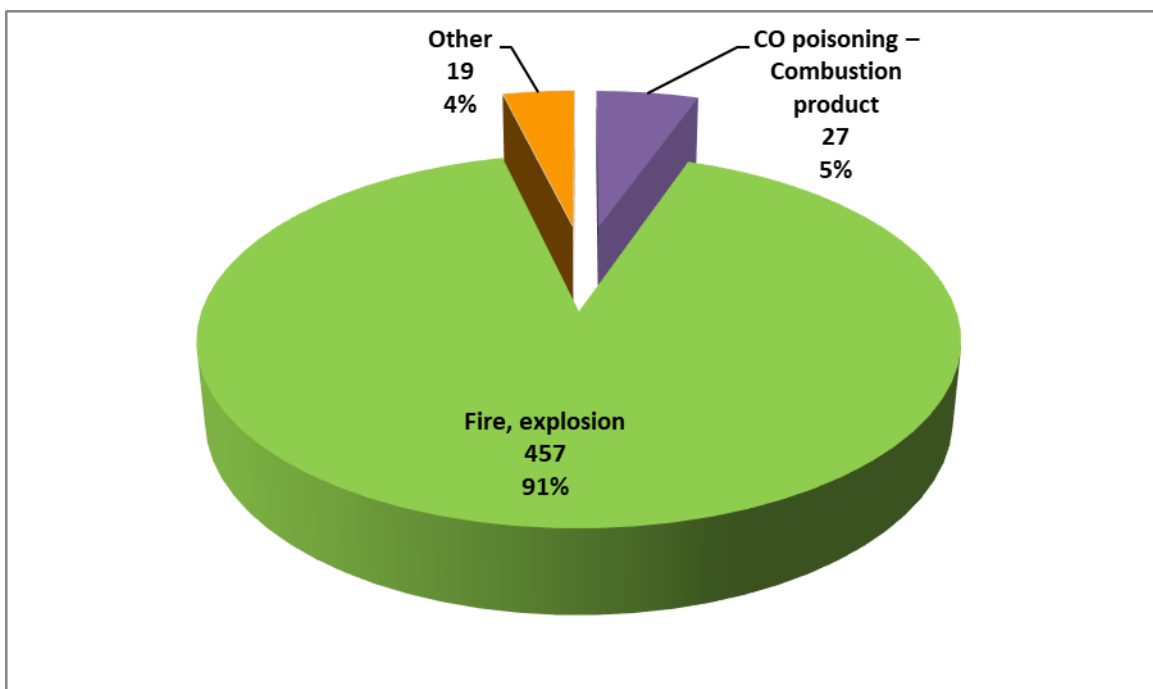
**GRAPH 1.5a Australia & New Zealand LPG accidents**  
*(Inclusive of NZ cabinet heater appliances)*

➤ *By accident type*



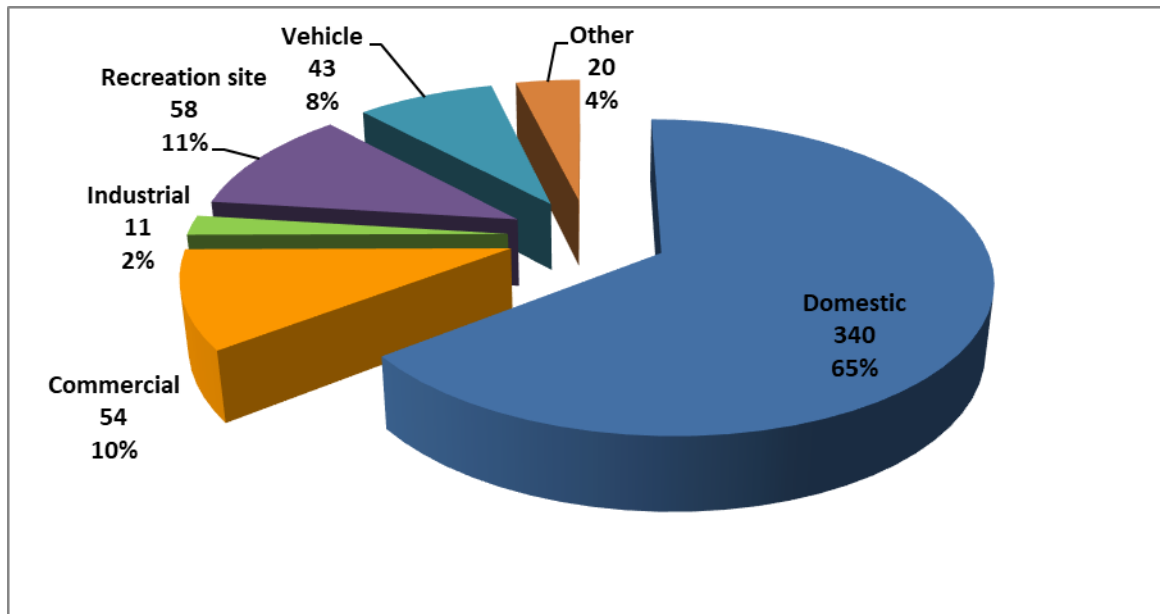
**GRAPH 1.5b Australia & New Zealand LPG accidents**  
*(Exclusive of NZ cabinet heater appliances)*

➤ *By accident type*



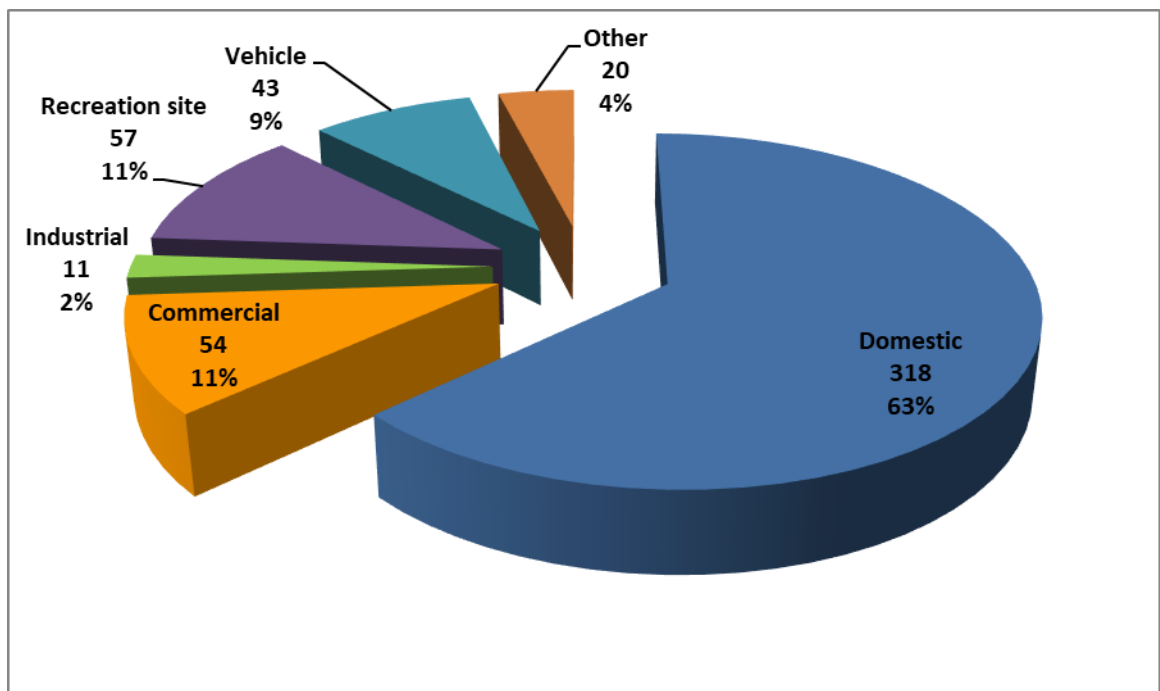
**GRAPH 1.6a Australia & New Zealand LPG accidents**  
*(Inclusive of NZ cabinet heater appliances)*

➤ *By equipment site (environment)*



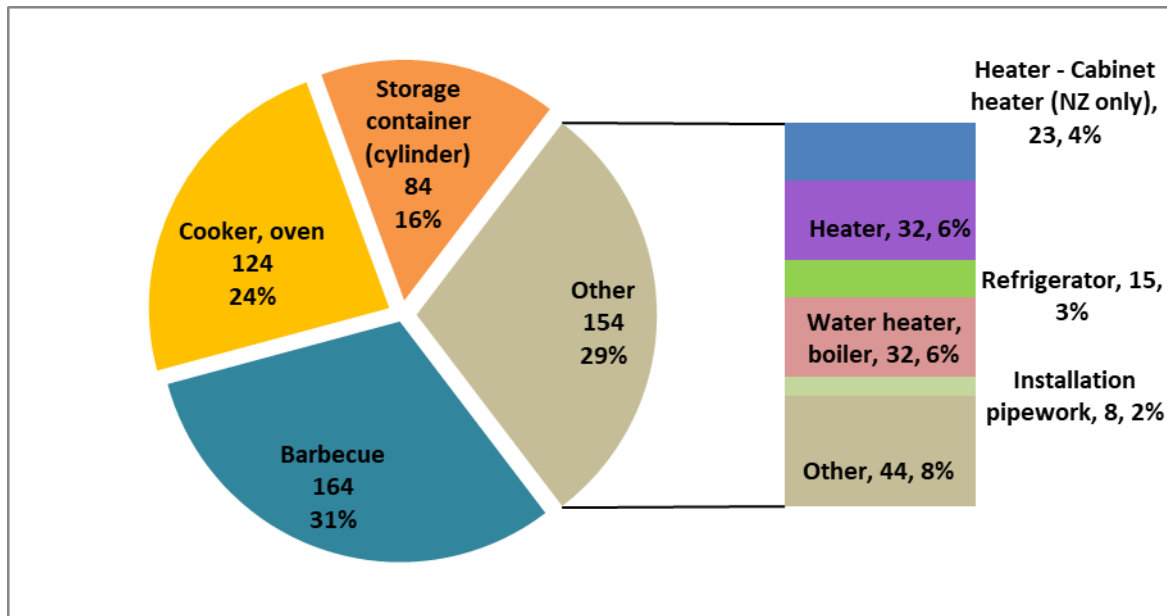
**GRAPH 1.6b Australia & New Zealand LPG accidents**  
*(Exclusive of NZ cabinet heater appliances)*

➤ *By equipment site (environment)*



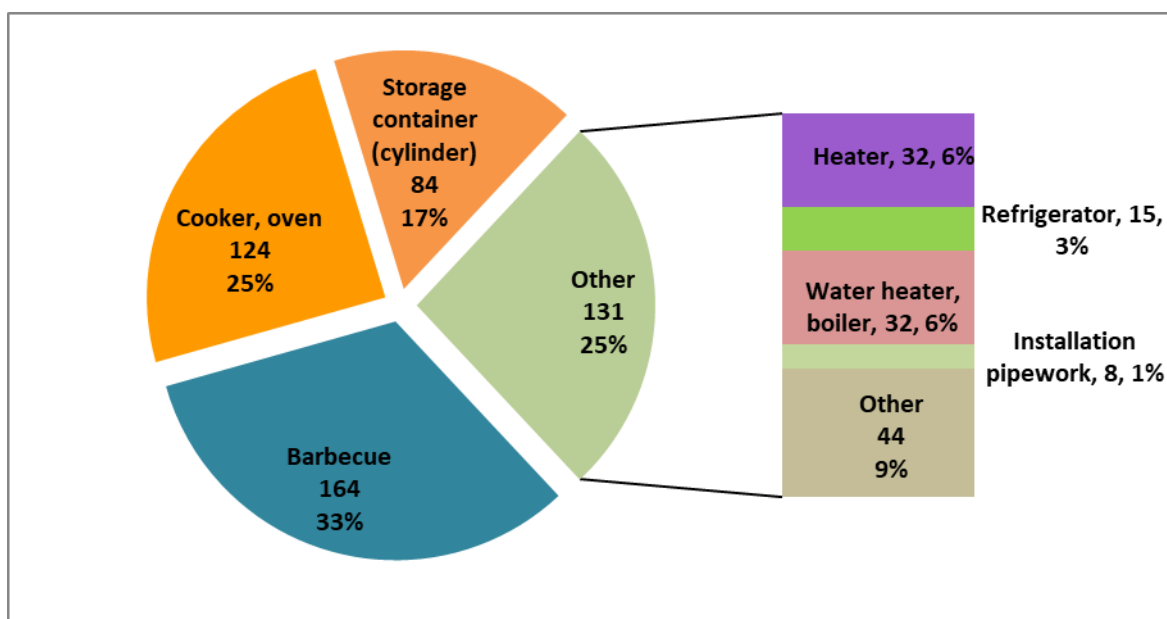
**GRAPH 1.7a Australia & New Zealand LPG accidents**  
*(Inclusive of NZ cabinet heater appliances)*

➤ **By equipment**



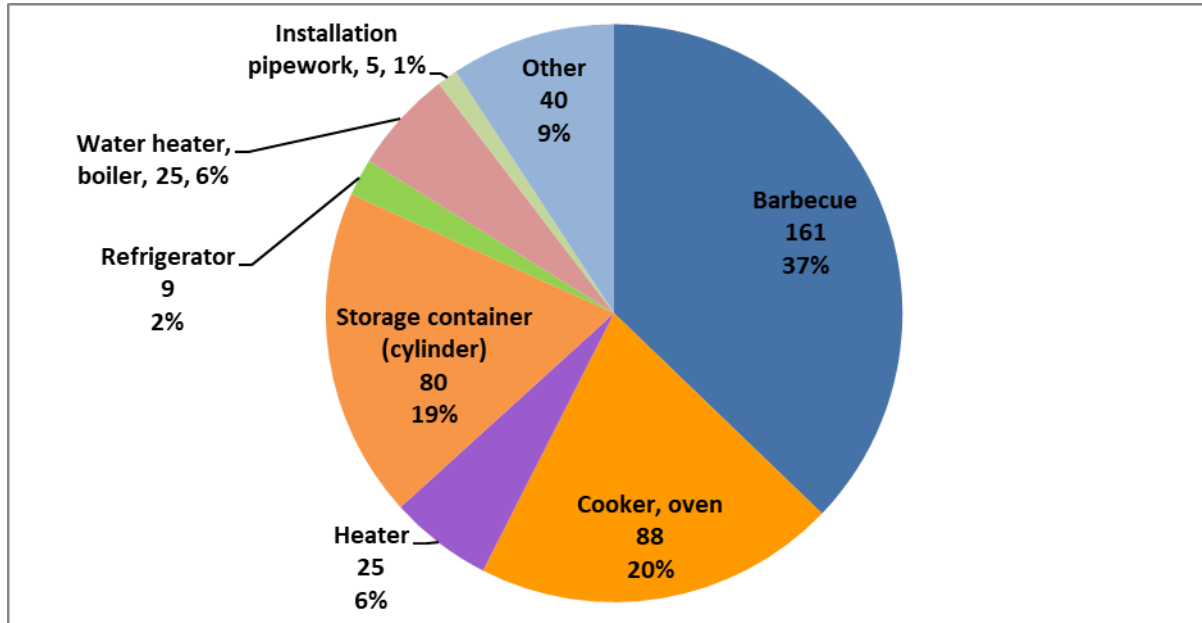
**GRAPH 1.7b Australia & New Zealand LPG accidents**  
*(Exclusive of NZ cabinet heater appliances)*

➤ **By equipment**



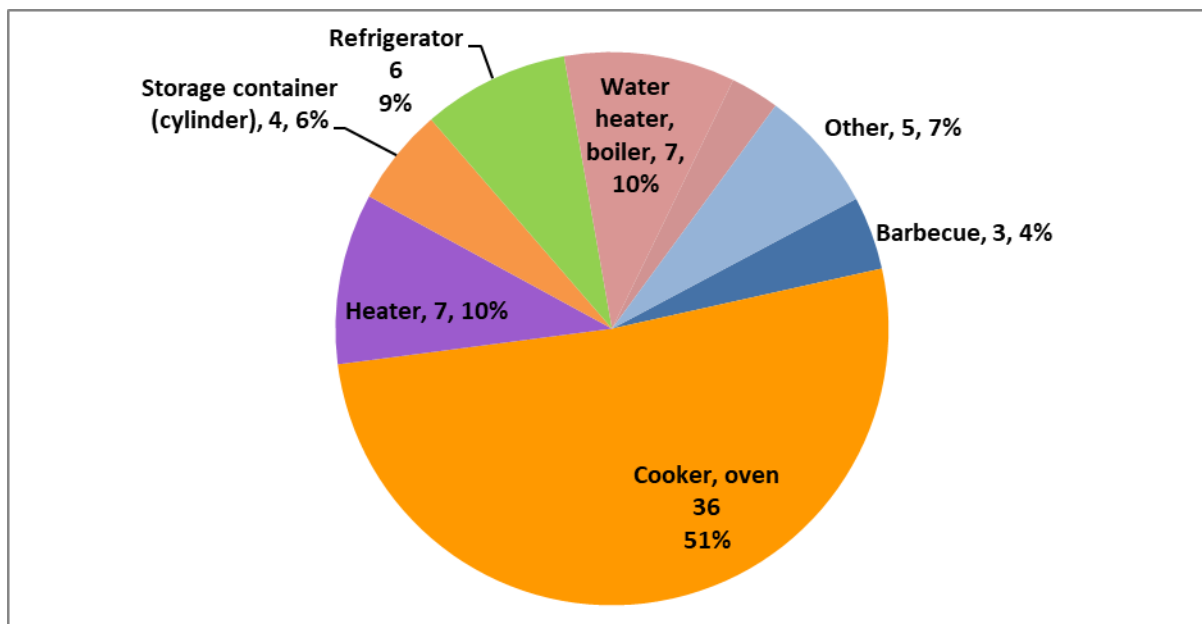
**GRAPH 1.7b (i) Australia & New Zealand LPG accidents**  
**Australia**

➤ **By equipment**



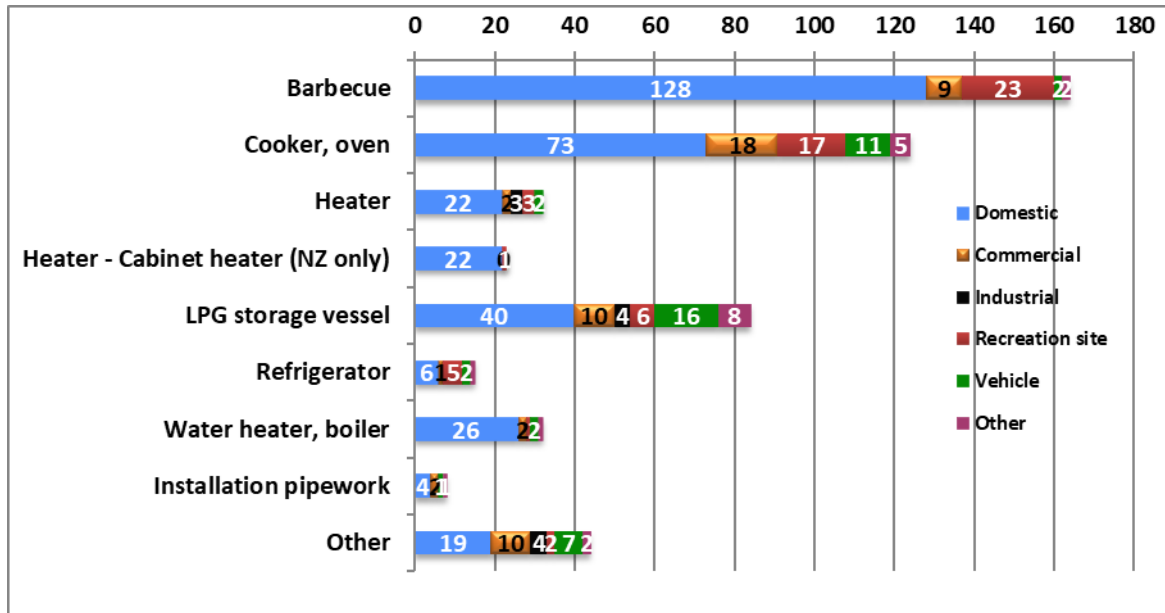
**GRAPH 1.7b (ii) Australia & New Zealand LPG accidents**  
**New Zealand (Exclusive of cabinet heater appliances)**

➤ **By equipment**



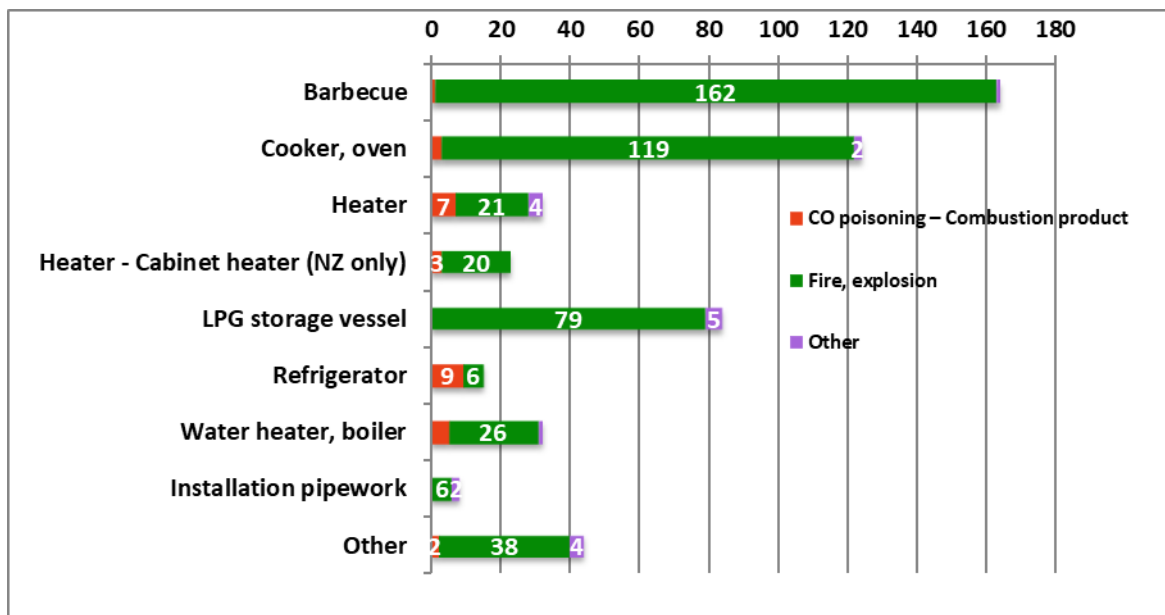
**GRAPH 1.8 Australia & New Zealand LPG accidents**

➤ *By equipment & its site (environment)*



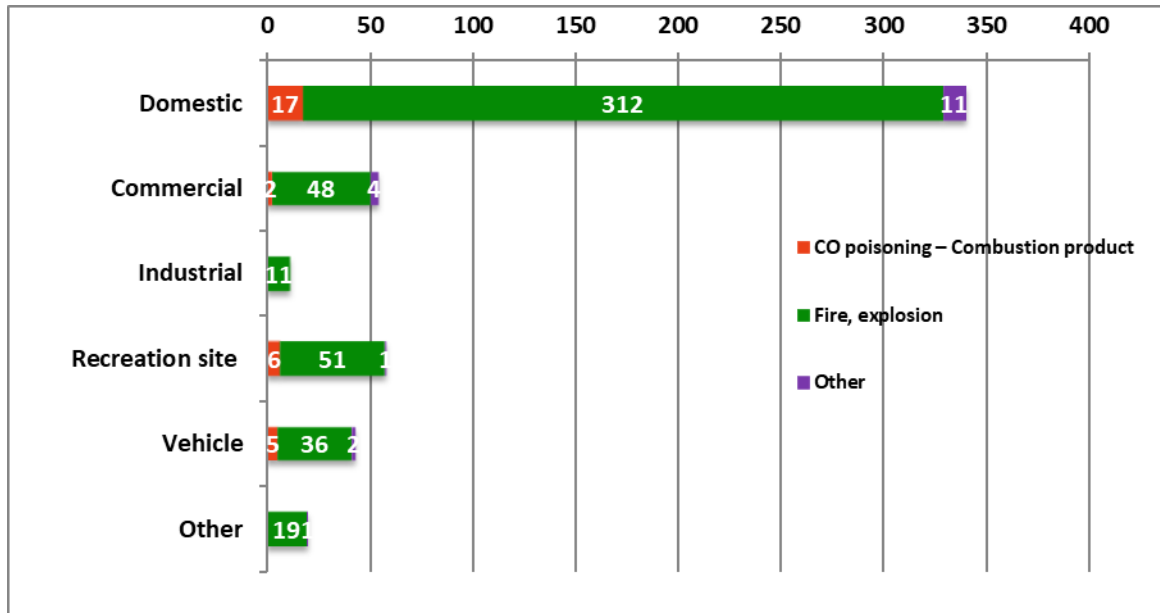
**GRAPH 1.9 Australia & New Zealand LPG accidents**

➤ *By equipment & accident type*



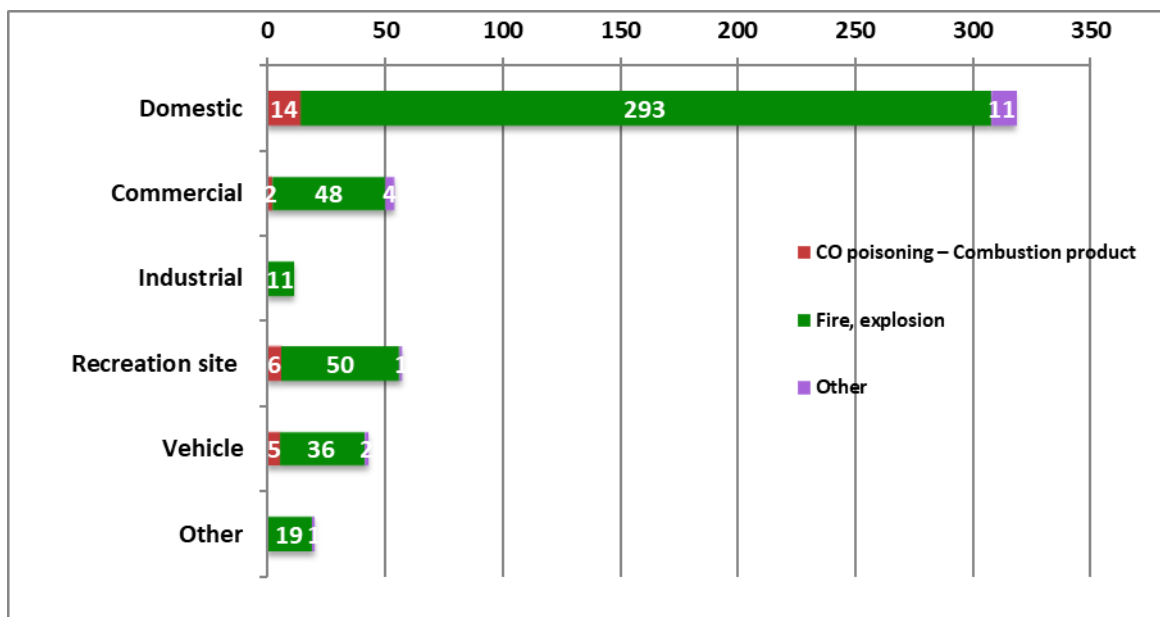
**GRAPH 1.10a Australia & New Zealand LPG accidents**  
*(Inclusive of NZ cabinet heater appliances)*

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



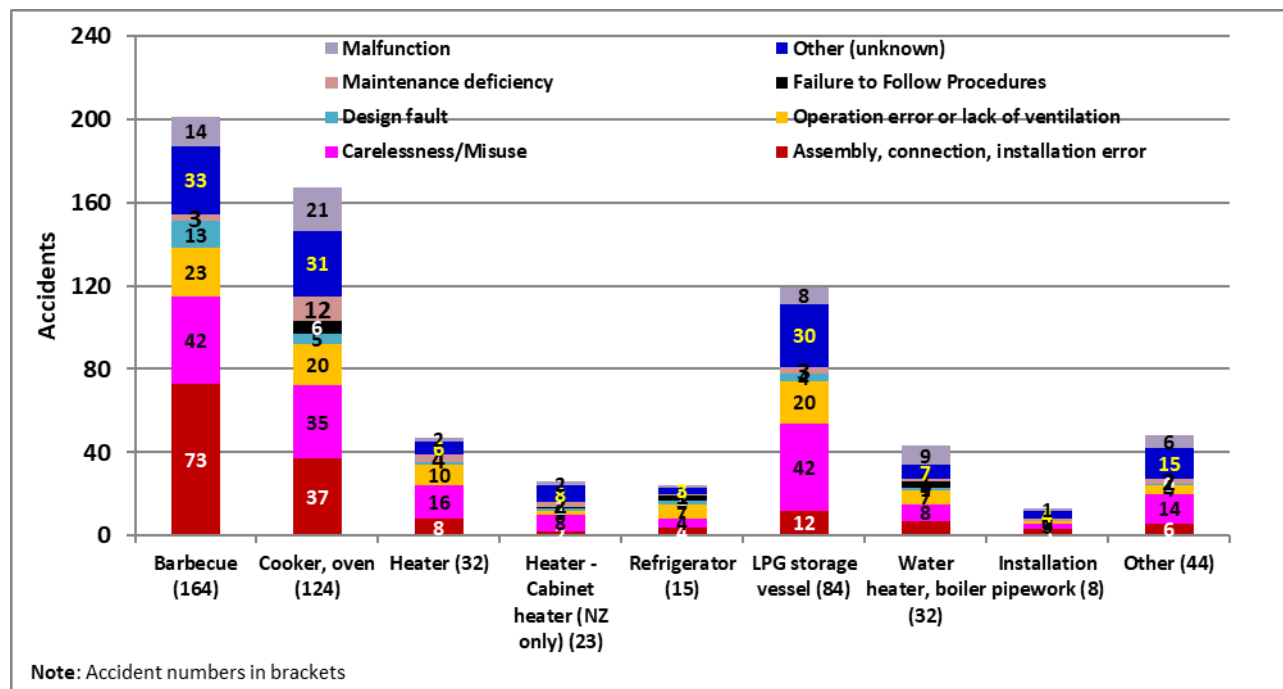
**GRAPH 1.10b Australia & New Zealand LPG accidents**  
*(Exclusive of NZ cabinet heater appliances)*

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



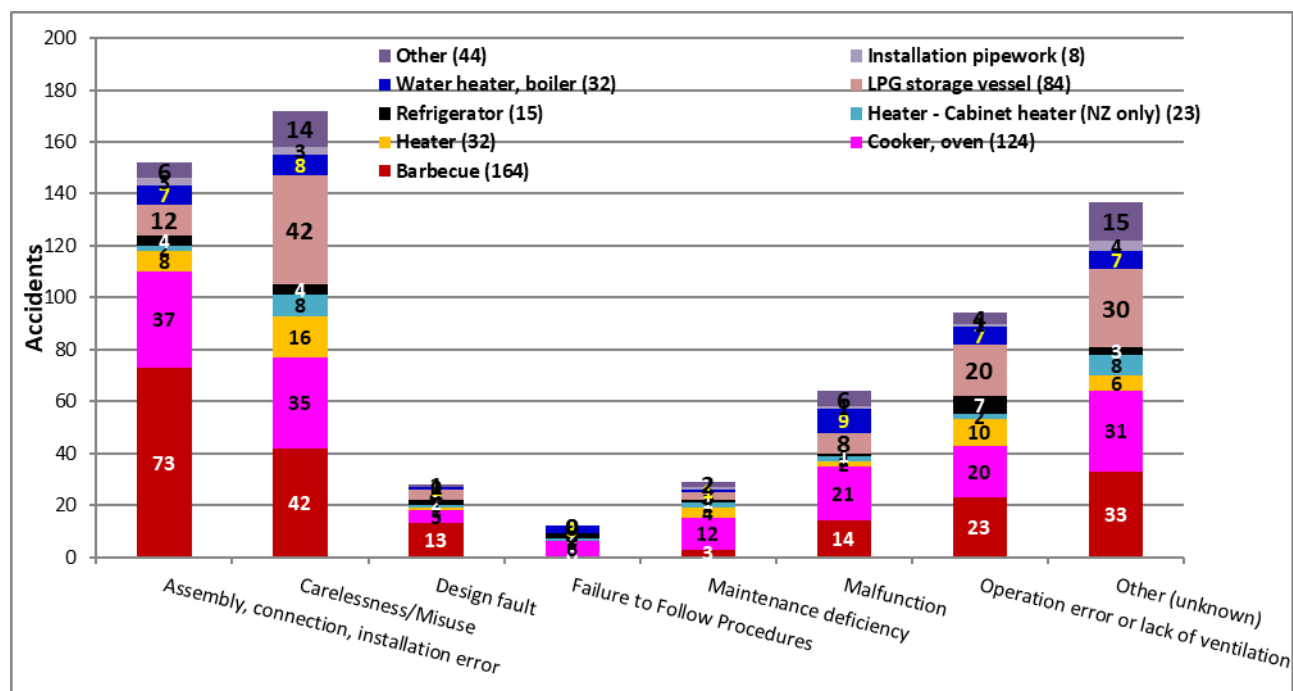
**GRAPH 1.11a Australia & New Zealand LPG accidents**

➤ *By equipment & causal factors*



**GRAPH 1.11b Australia & New Zealand LPG accidents**

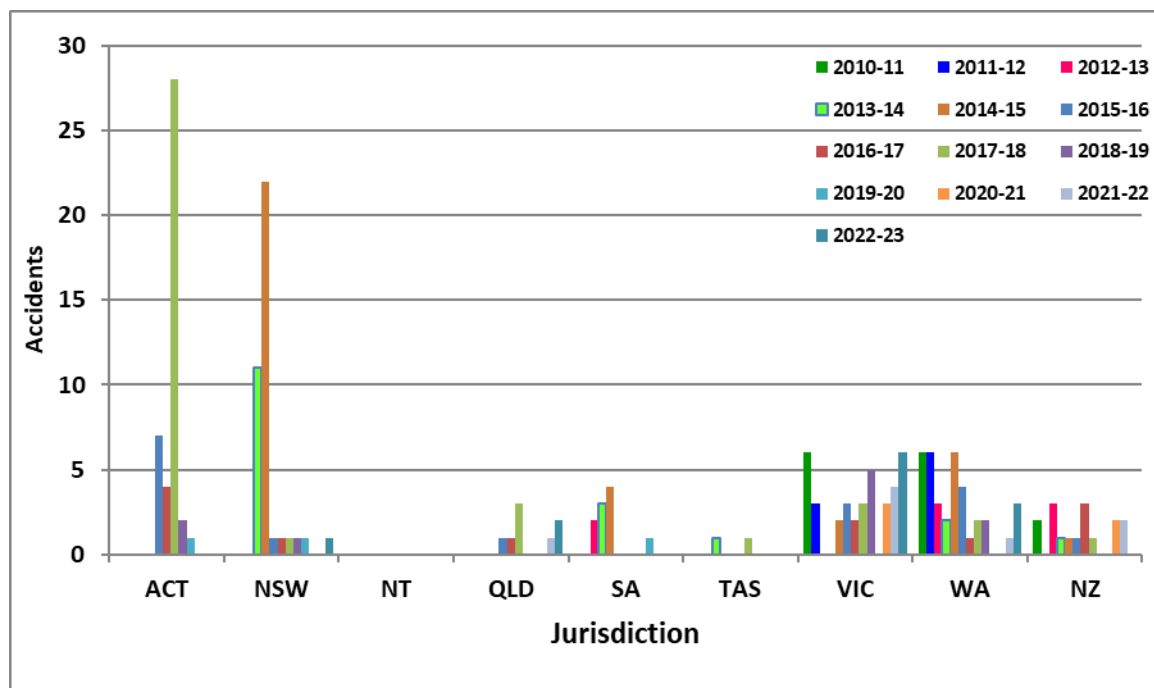
➤ *By equipment & causal factors*



## 2- Natural Gas (NG) serious accidents

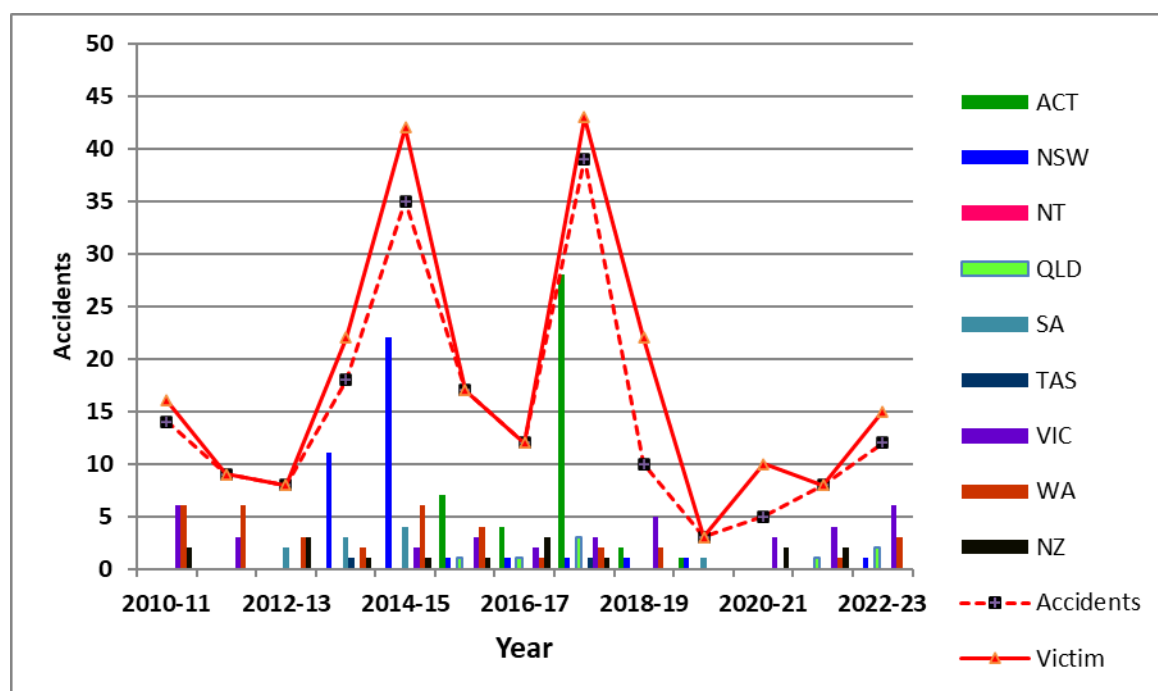
GRAPH 2.1 Australia & New Zealand NG accidents

### ➤ By state/country



GRAPH 2.2 Australia & New Zealand NG accidents

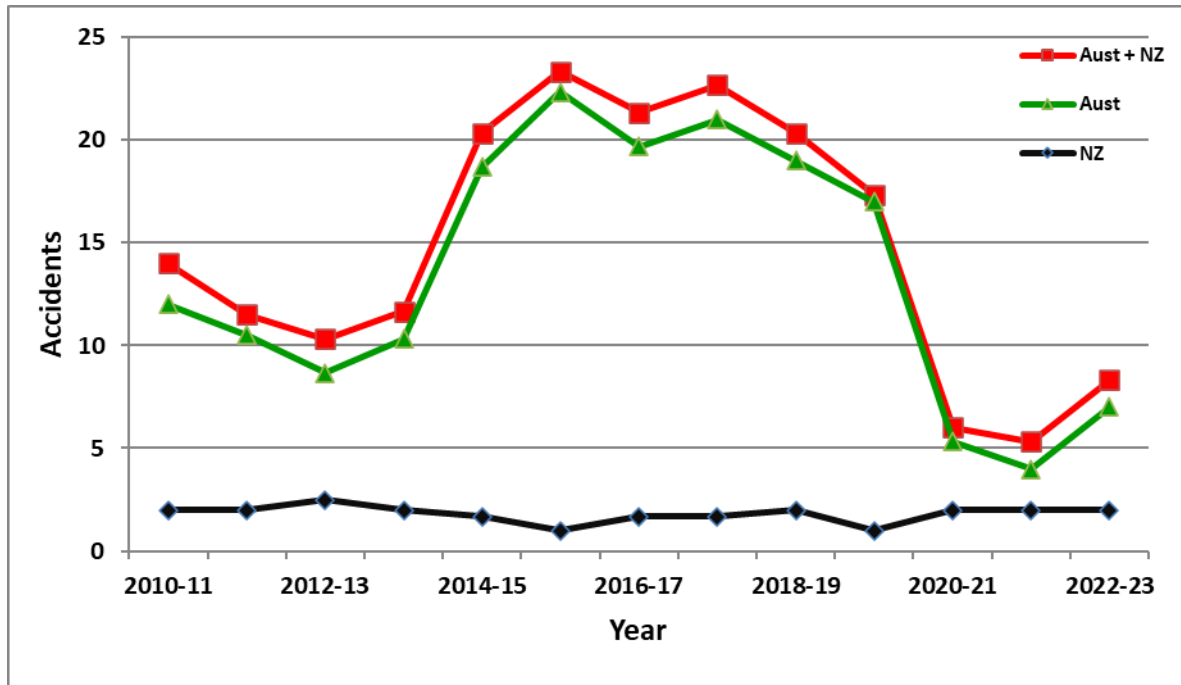
### ➤ By year





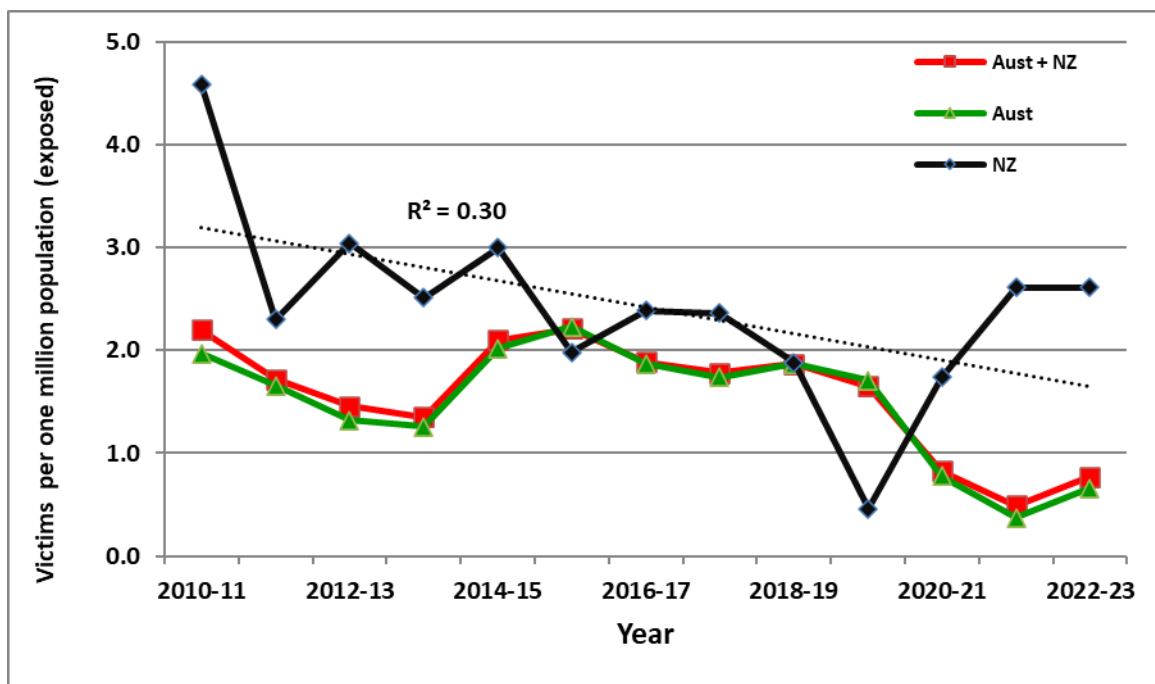
**GRAPH 2.3 Australia & New Zealand NG accidents**

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



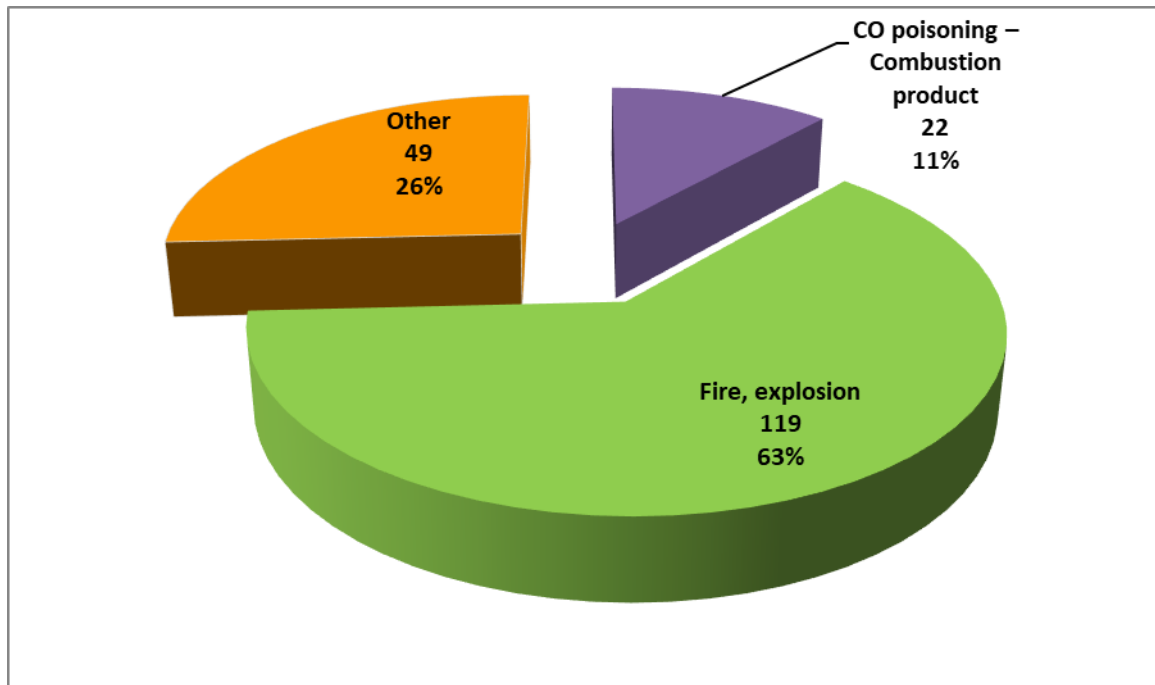
**GRAPH 2.4 Australia & New Zealand NG accidents**

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



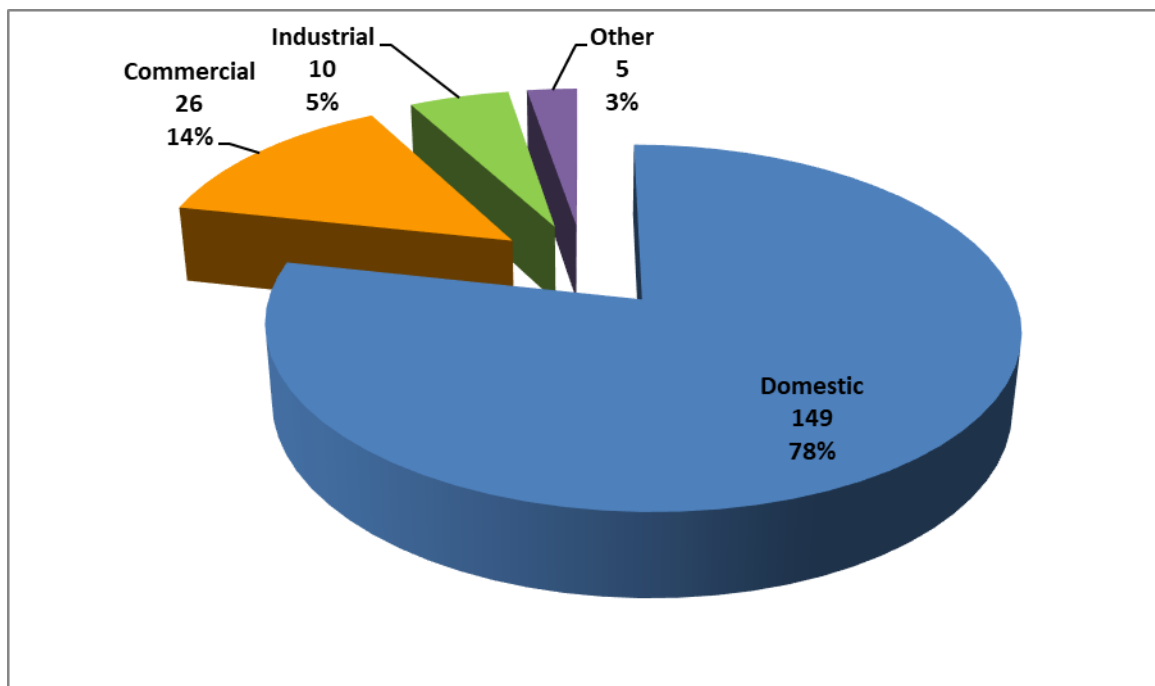
**GRAPH 2.5 Australia & New Zealand NG accidents**

➤ ***By accident type***



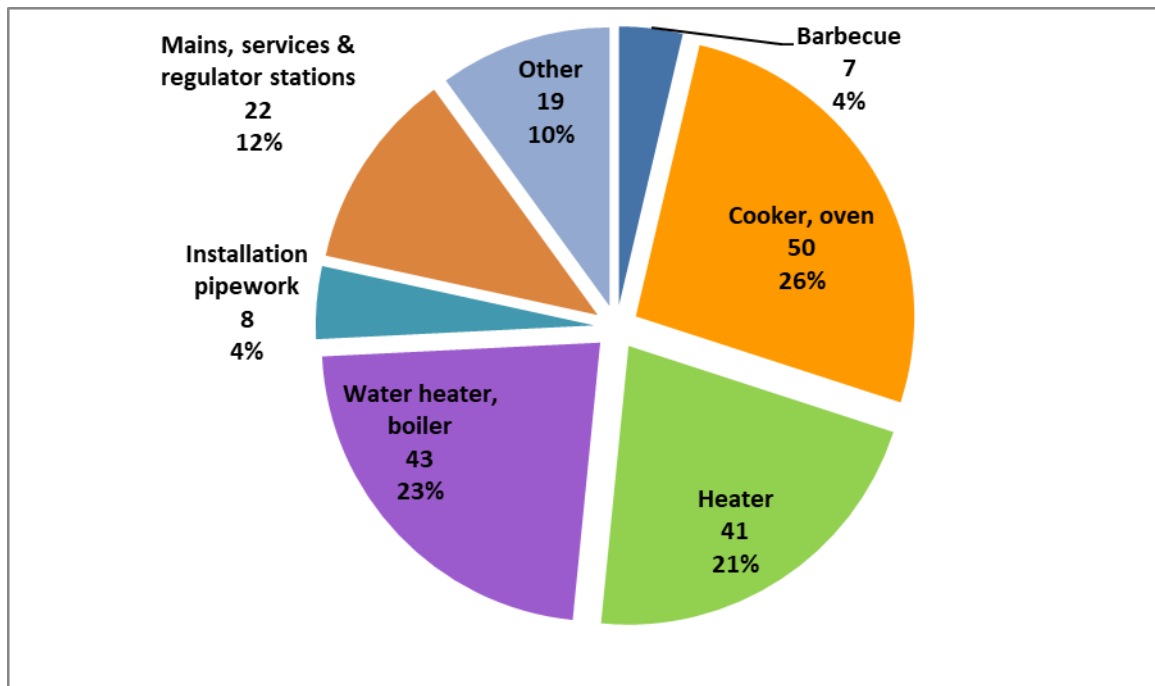
**GRAPH 2.6 Australia & New Zealand NG accidents**

➤ ***By equipment site (environment)***



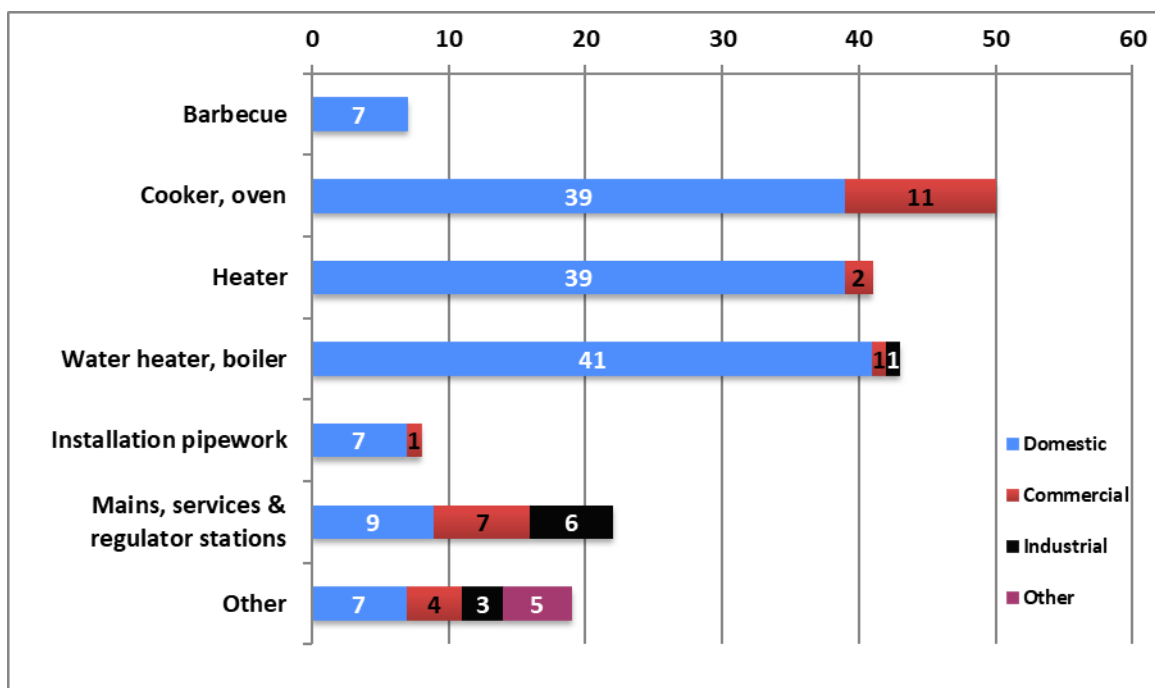
**GRAPH 2.7 Australia & New Zealand NG accidents**

➤ *By equipment*



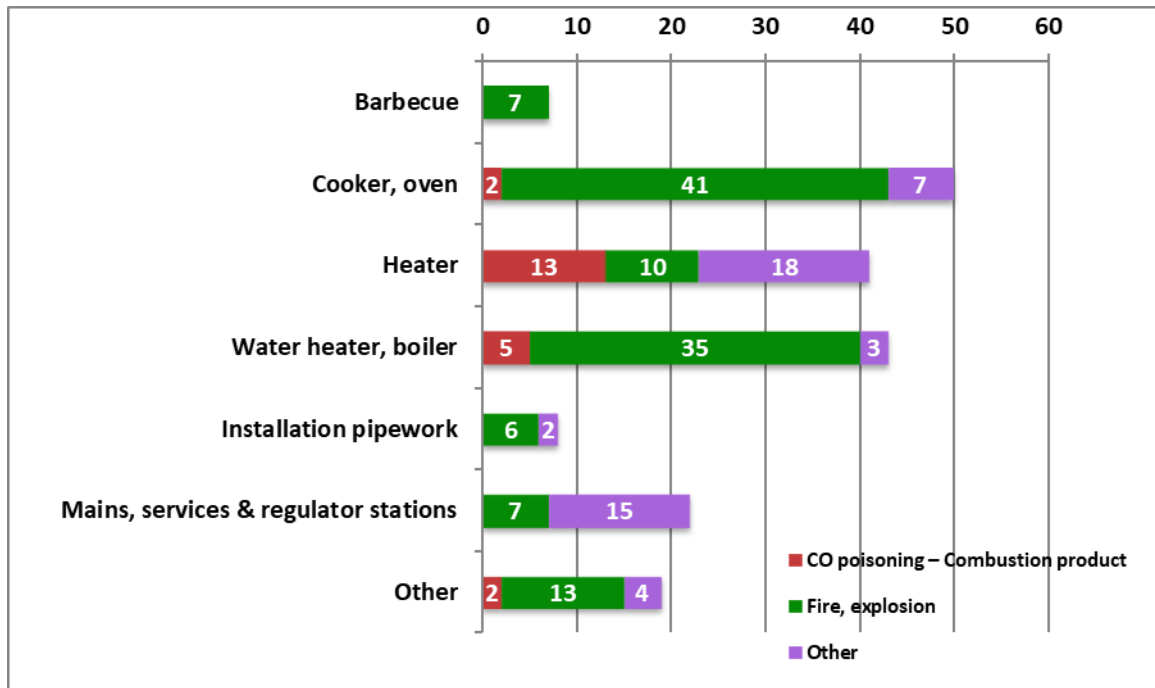
**GRAPH 2.8 Australia & New Zealand NG accidents**

➤ *By equipment & its site (environment)*



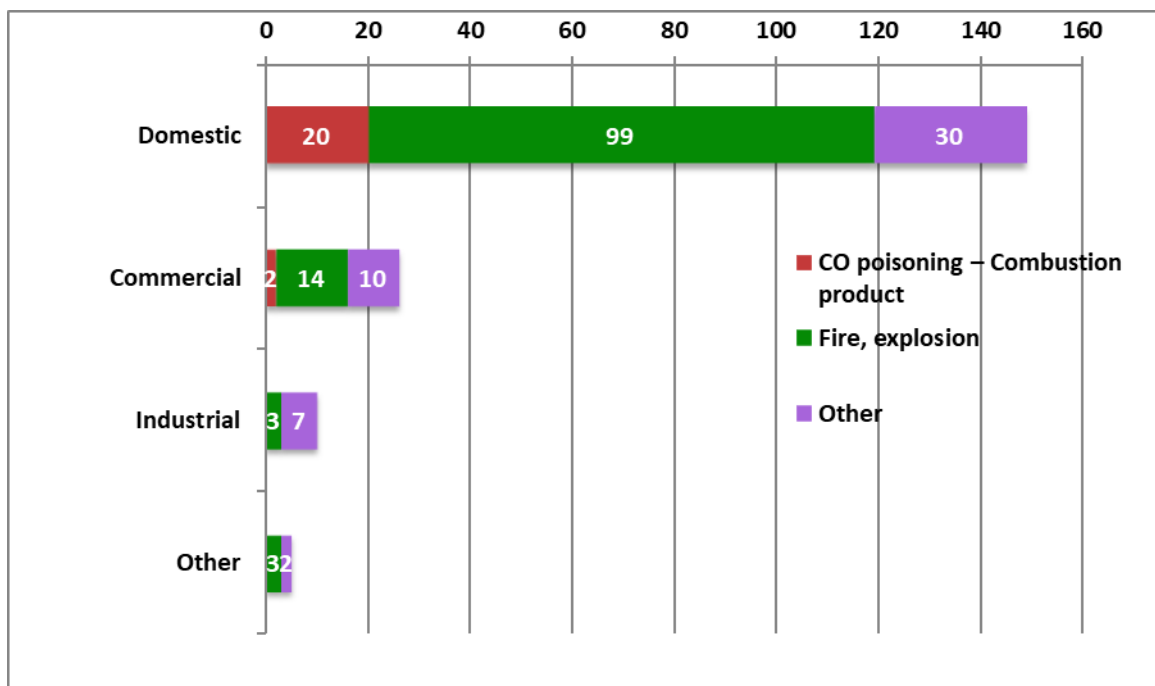
**GRAPH 2.9 Australia & New Zealand NG accidents**

➤ *By equipment & accident type*



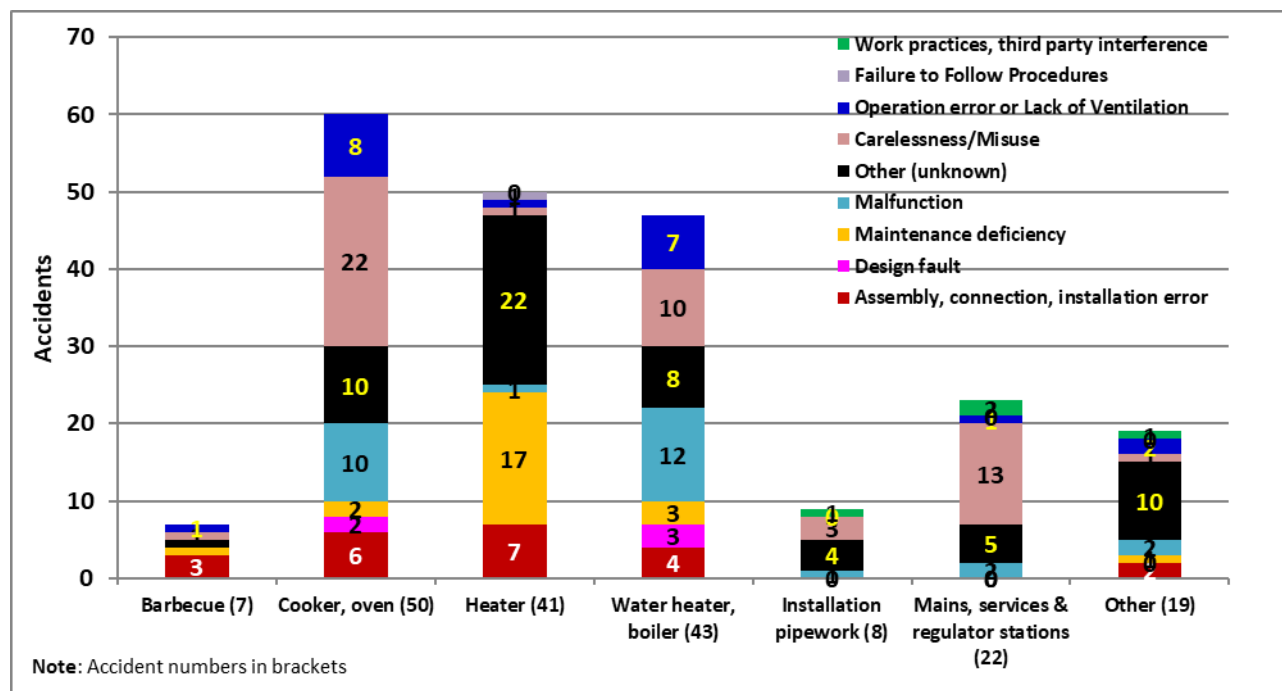
**GRAPH 2.10 Australia & New Zealand NG accidents**

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



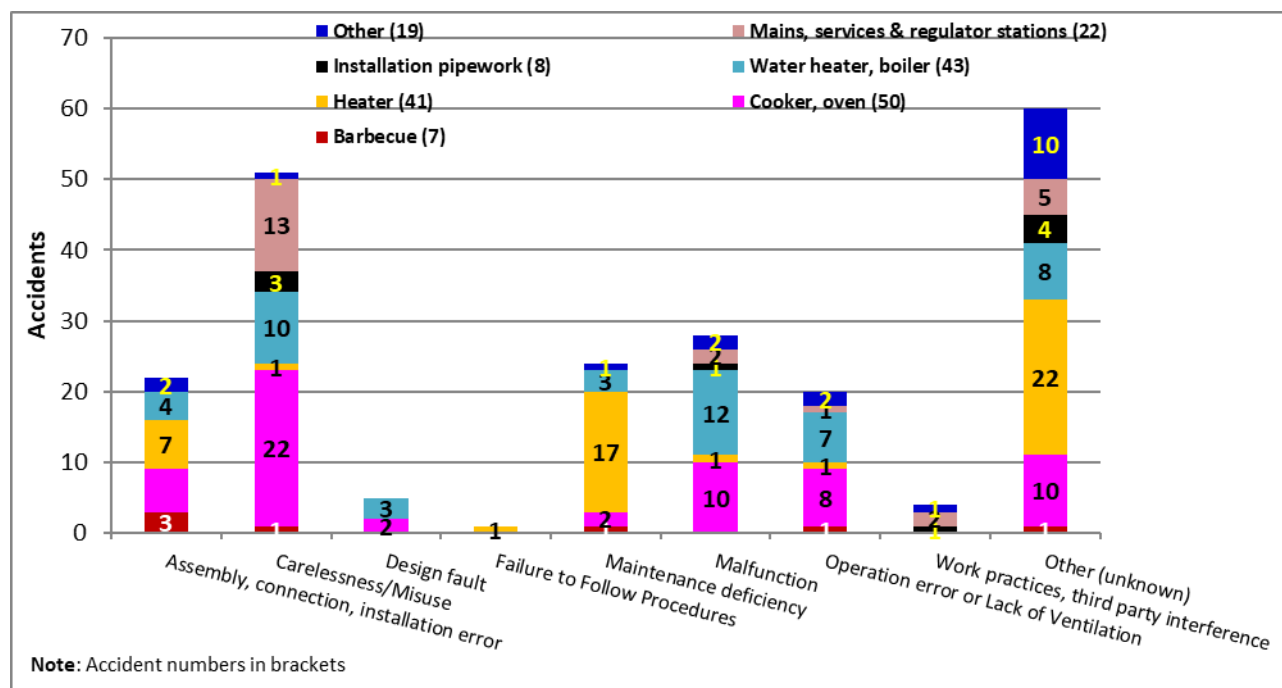
**GRAPH 2.11a Australia & New Zealand NG accidents**

➤ *By equipment & causal factors*



**GRAPH 2.11b Australia & New Zealand NG accidents**

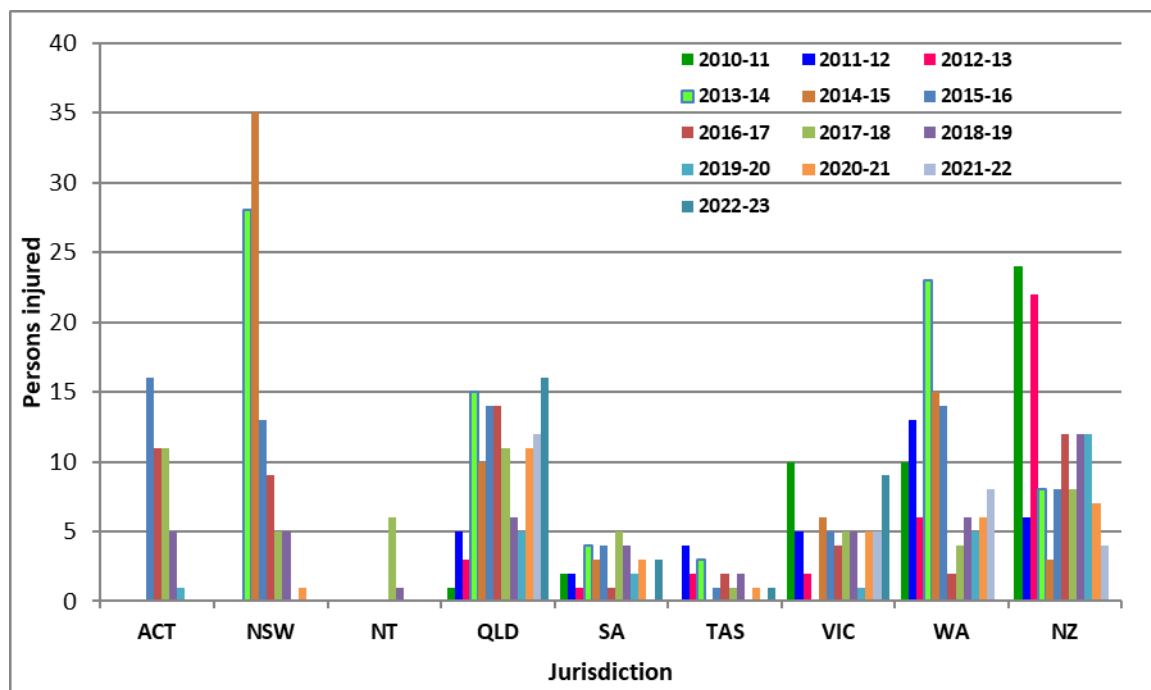
*By equipment & causal factors*



### 3- Gas injuries

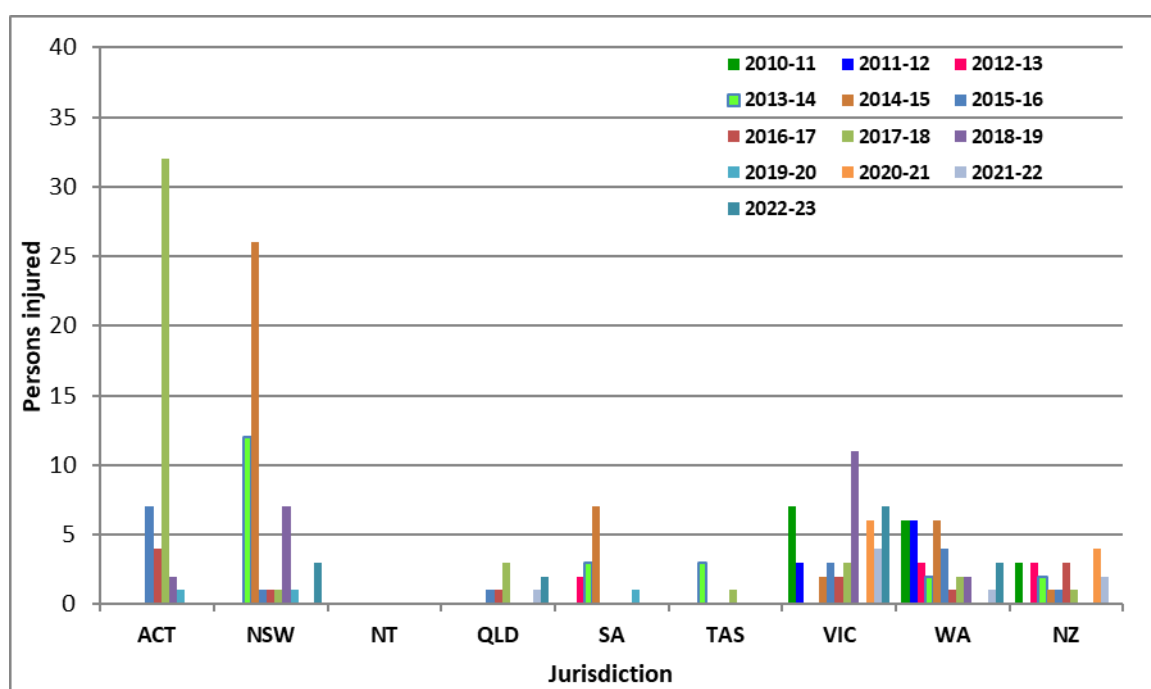
**GRAPH 3.1a Australia & New Zealand gas injuries**  
(LPG)

➤ *By state/country*



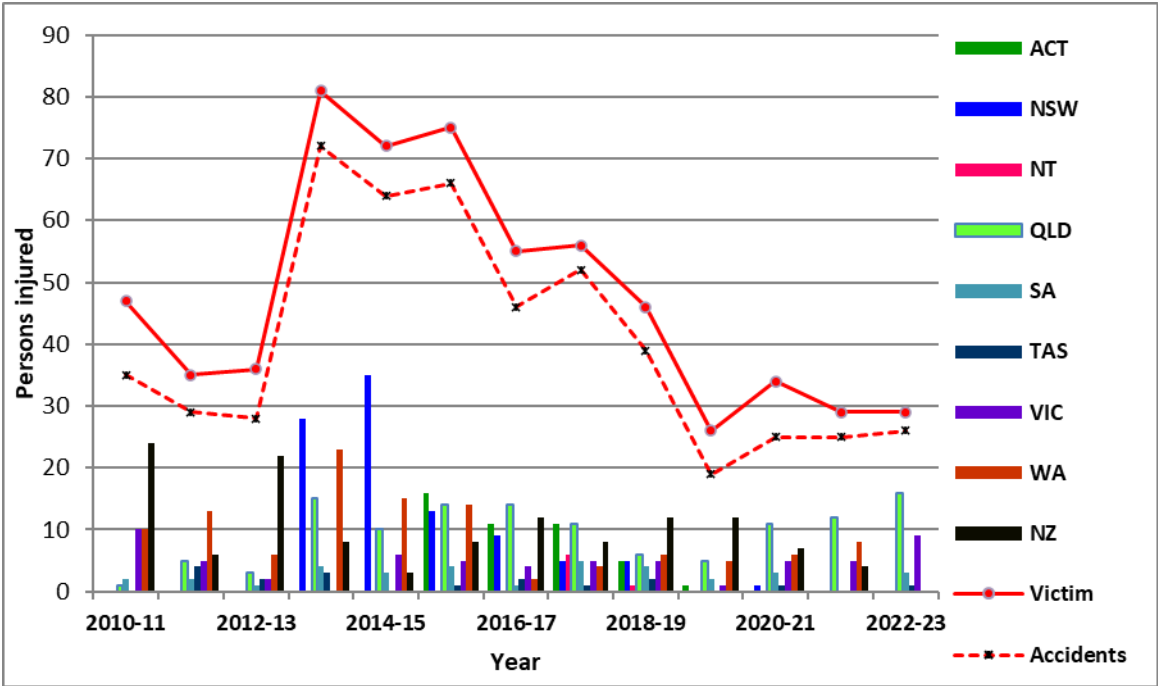
**GRAPH 3.1b Australia & New Zealand gas injuries**  
(NG)

➤ *By state/country*



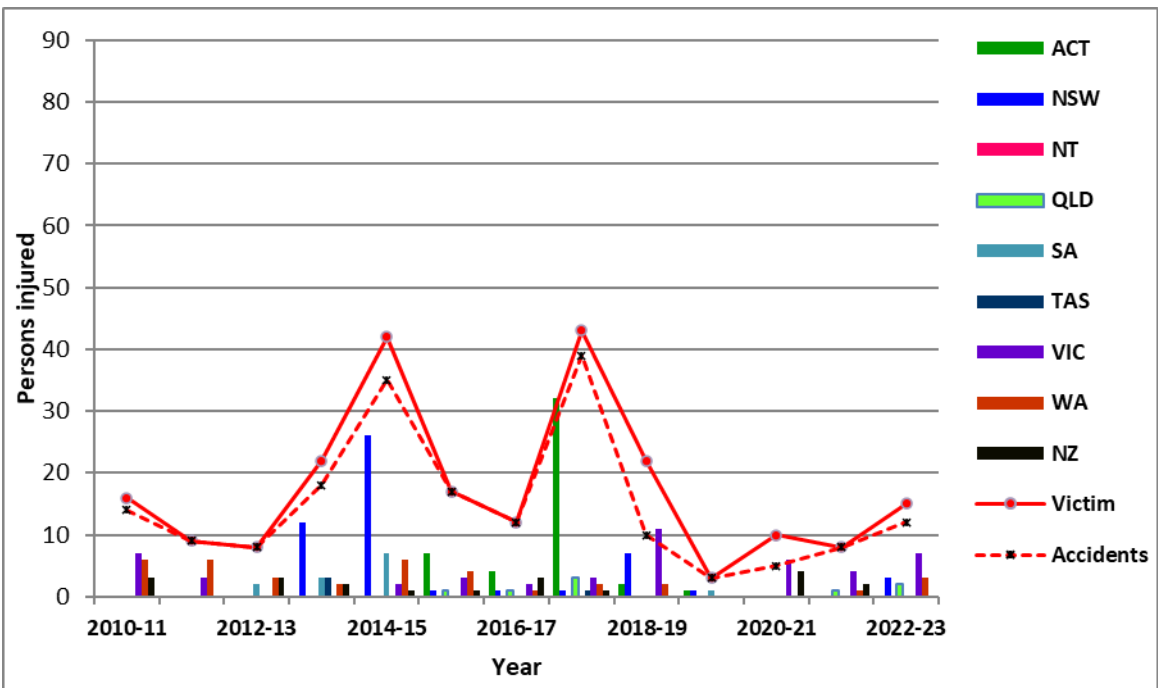
**GRAPH 3.2a Australia & New Zealand gas injuries**  
**(LPG)**

➤ **By year**



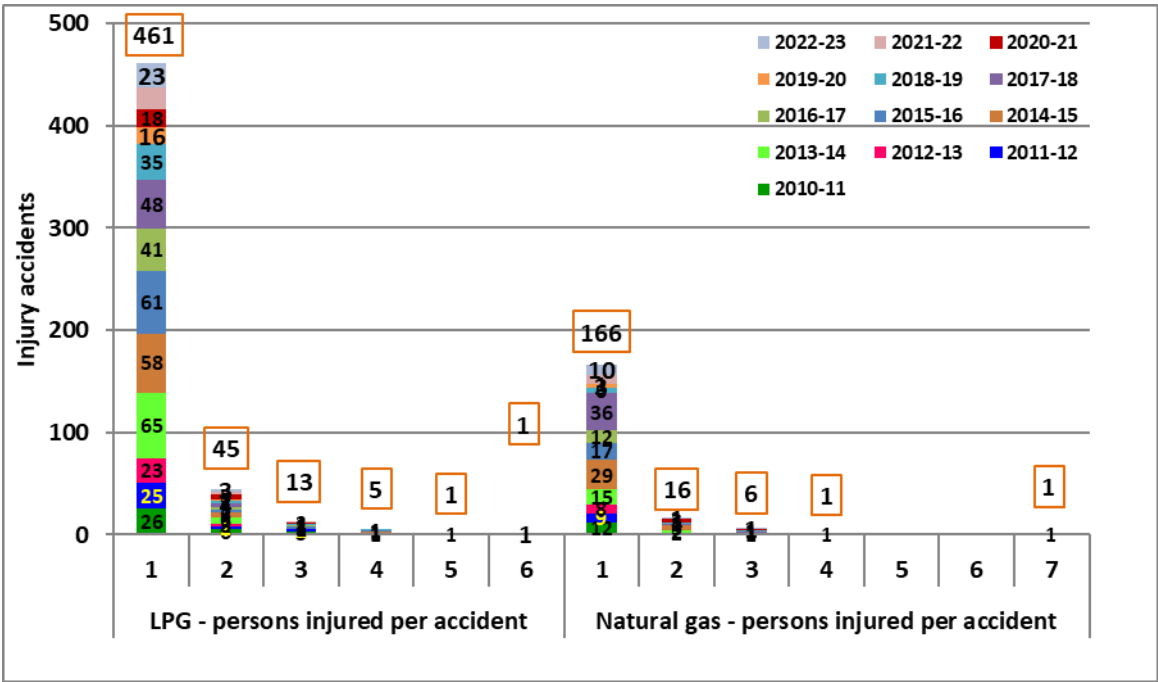
**GRAPH 3.2a Australia & New Zealand gas injuries**  
**(NG)**

➤ **By year**



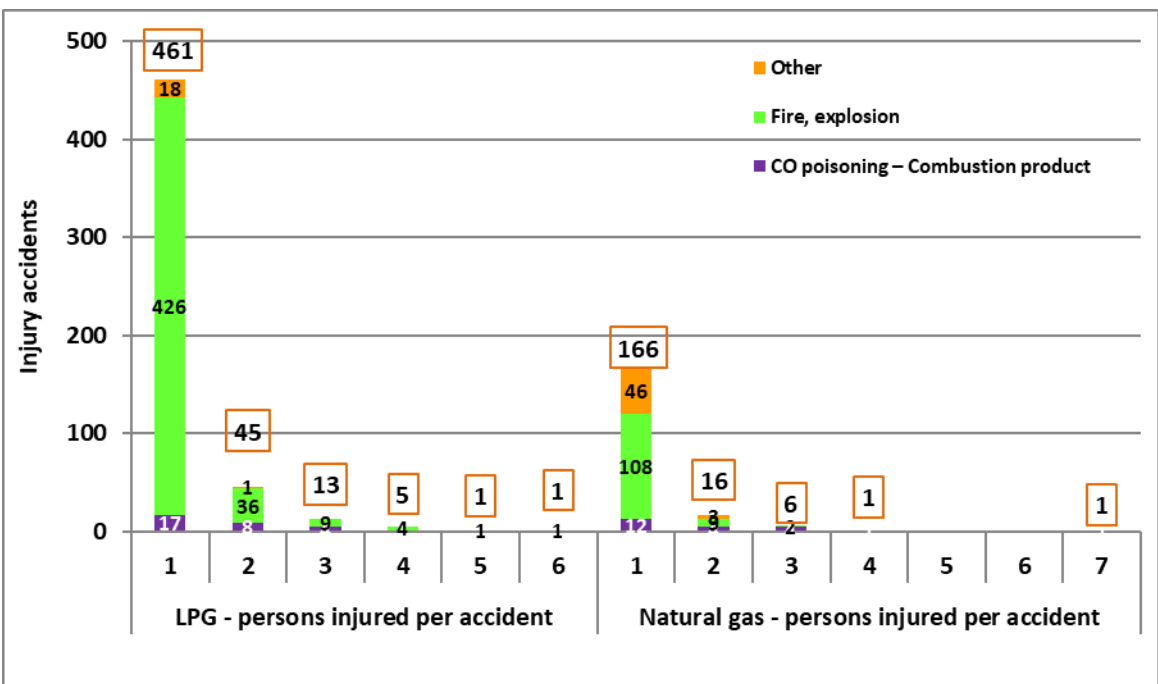
GRAPH 3.3 Australia & New Zealand gas injuries

➤ *By consequence (injuries per accident)*



GRAPH 3.4 Australia & New Zealand gas injuries

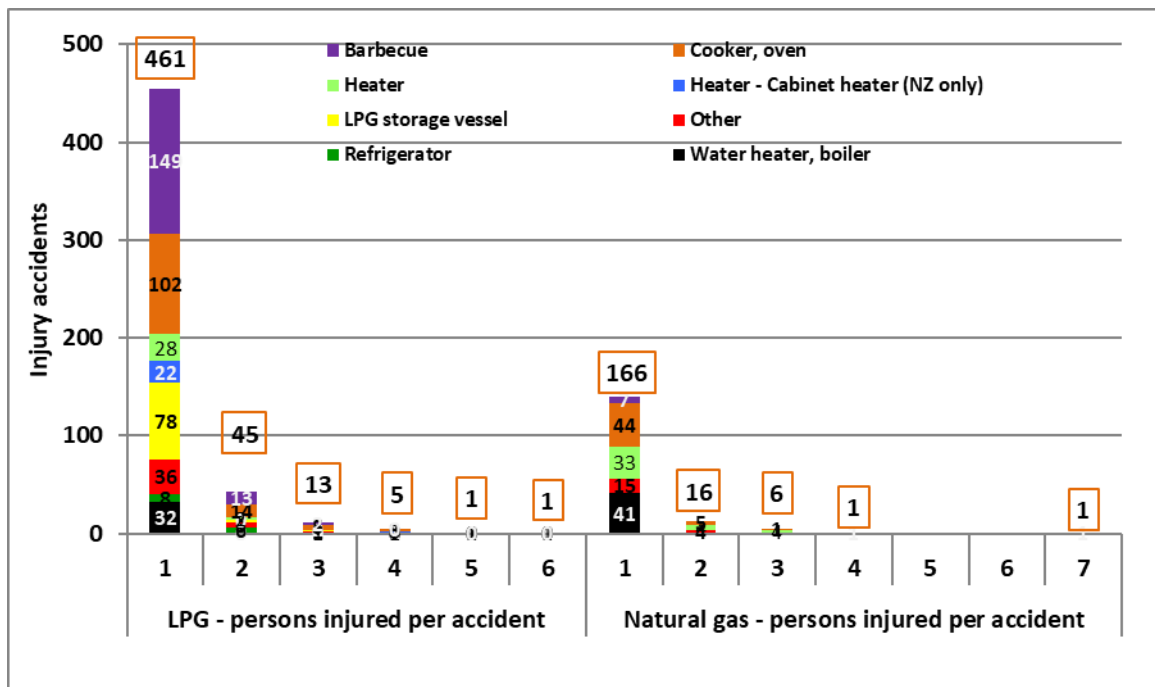
➤ *By consequence (injuries per accident) & accident type*





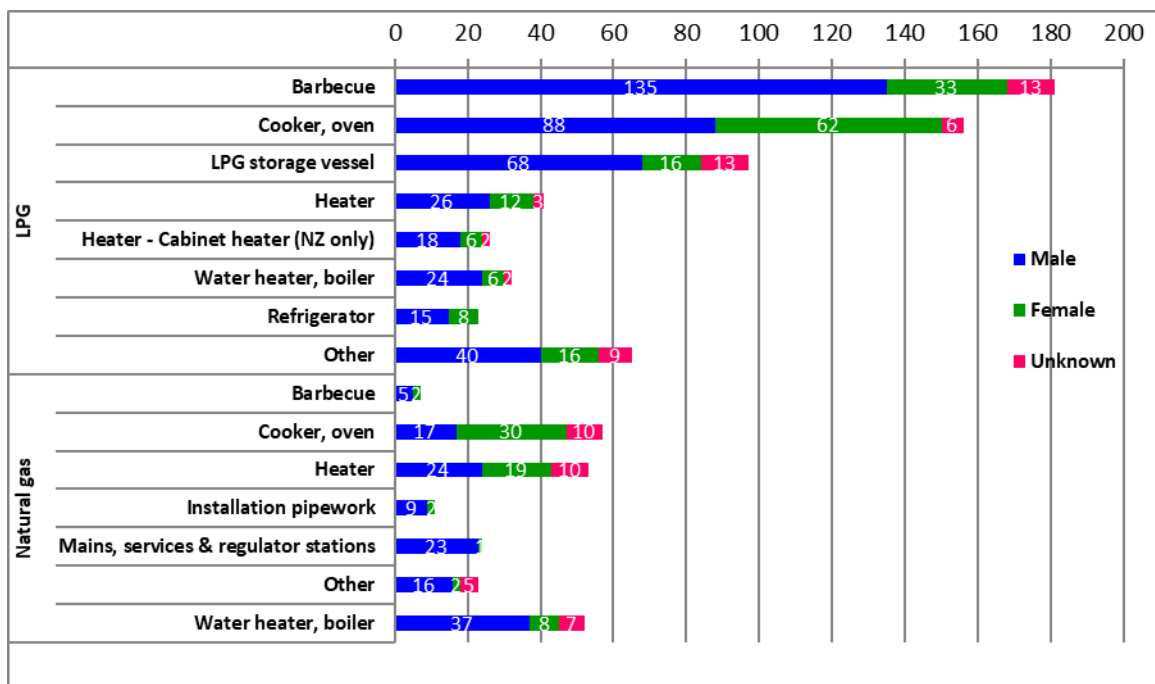
### GRAPH 3.5 Australia & New Zealand gas injuries

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



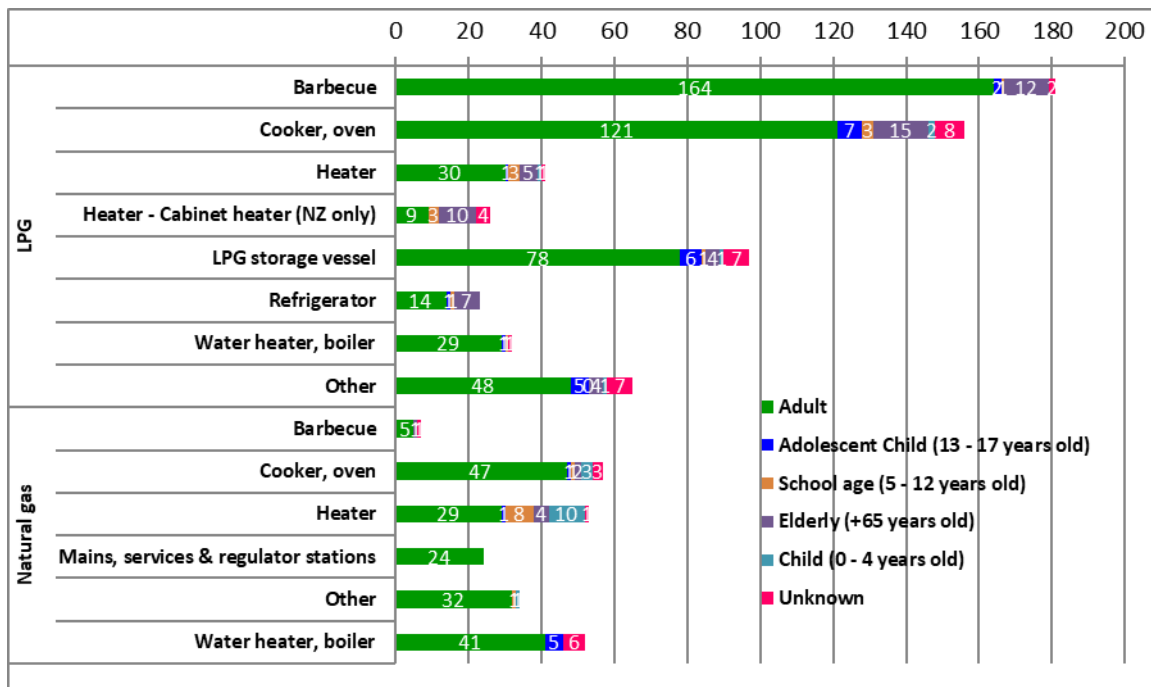
### GRAPH 3.6 Australia & New Zealand gas injuries

➤ *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		26
<b>Total</b>	41	88	6	107	29	15	53	94	433	93	526

**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		29
<b>Total</b>	44	96	7	123	34	17	62	112	495	126	621

**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	0	12
<b>Total</b>	42	39	0	8	10	2	37	36	174	16	190

**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	0	15
<b>Total</b>	46	52	0	8	13	4	48	36	207	20	227