

## Hazardous substances notifications in New Zealand

### HIGHLIGHTS:

- There were 61 hazardous substances notifications in 2015, compared to 95 in 2014.
- More than half of the notifications were for males.
- The majority of notifications were from unintentional exposures.
- For children less than five years old, household agents were the most common cause of hazardous substances injury.
- Most notifications were injuries that occurred in the home.



### Injuries from hazardous substances is an important public health problem

Injuries from hazardous substance exposures in New Zealand are often preventable. A high proportion of these incidents are caused by hazardous substances used in everyday domestic and workplace situations. Hazardous substances can cause considerable harm. Symptoms and severity vary widely from case to case. Adverse health effects can be short or long term. Headaches, nausea or vomiting and skin corrosion are examples of acute health effects. Chronic health effects include asthma, dermatitis, nerve damage or cancer (MBIE, 2013).

Notification data come from an electronic reporting system, the Hazardous Substances Disease and Injury Reporting Tool (HSDIRT). This tool was designed for general practitioners (GPs) to notify cases of disease and injury related to lead and other hazardous substances. The HSDIRT has operated throughout New Zealand since late 2013.

### There were 61 and 95 hazardous substances notifications in 2015 and 2014 respectively

There were 61 hazardous substances notifications in 2015, a decrease from 95 notifications in 2014 (Table 1).

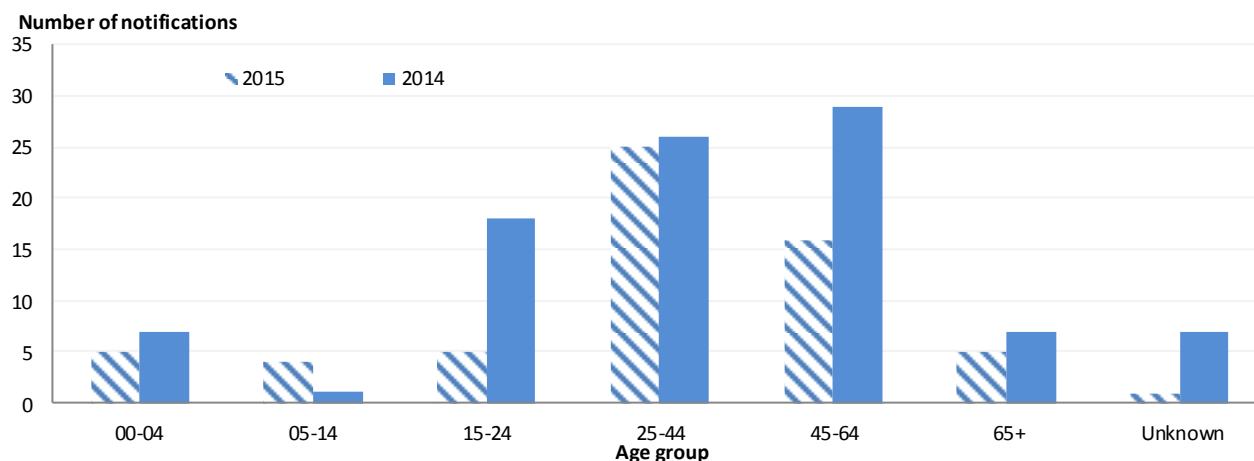
**Table 1: Number of hazardous substances notifications, by gender, 2014 & 2015**

Gender	Number of hazardous substances notifications	
	2015	2014
Female	27	44
Male	33	51
Unknown	1	
<b>Total</b>	<b>61</b>	<b>95</b>

### Males were the most affected

Over half of the hazardous substances notifications were males in both 2014 and 2015 (Table 1). In 2015, the 25-44 year age group had the highest number of hazardous substances notifications (25 notifications, 41% of total). In 2014, the 45-64 year age group had the highest number of notifications (31 notifications, 31% of total). (Figure 1)

**Figure 1: Number of hazardous substances notifications, by age group, 2014-2015.**



Note: Cases that were recorded as 'Not a case' or exposure to substances not subject to the HSNO act were excluded from the analysis.

Source of Table 1 and Figure 1: Hazardous Substances Disease and Injury Reporting Tool (2015)

## Hazardous substances notifications in New Zealand

European/Other ethnic group accounted for the highest number of notifications (38 notifications in 2015, and 48 notifications in 2014) (Table 2).

**Table 2: Number of hazardous substances notifications, by ethnicity, 2014 & 2015**

Ethnicity	Number of notifications	
	2015	2014
Māori	6	12
Pacific	4	5
Asian	2	8
European/Other	38	48
Unknown	11	22
<b>Total</b>	<b>61</b>	<b>95</b>

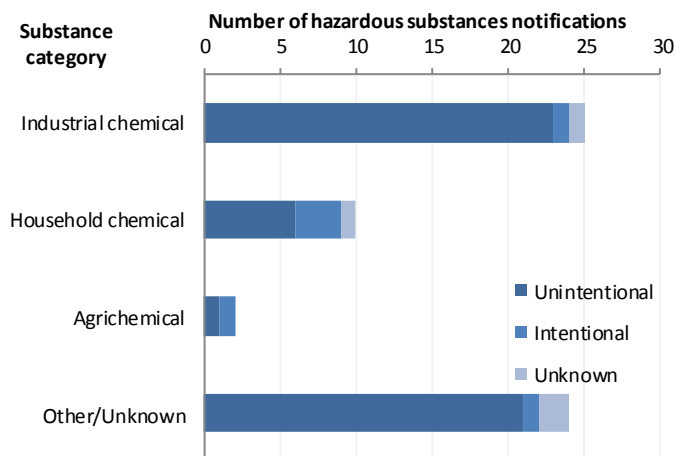
Note: Cases that were recorded as 'Not a case' or exposure to substances not subject to the HSNO act were excluded from the analysis.

Source: Hazardous Substances Disease and Injury Reporting Tool (2015)

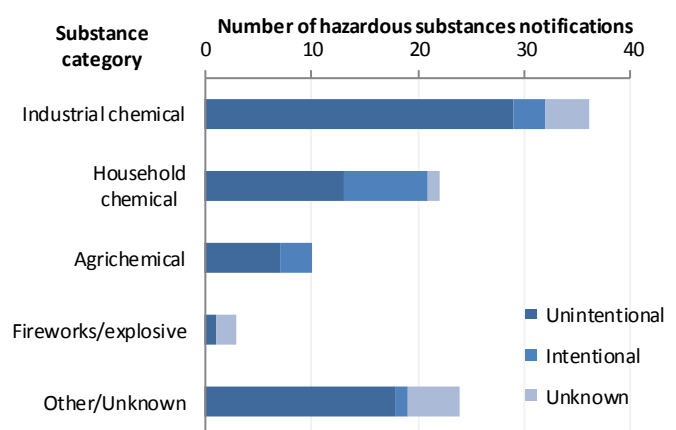
### Most notifications were from unintentional exposures

In 2015, 84 percent (51 notifications) of hazardous substances notifications were from unintentional exposures and the most common substances category was industrial chemical (25 notifications) (Figure 2). A similar trend was seen in 2014, where 72 percent (68 notifications) of notifications were from unintentional exposure. Industrial chemical was also the most common substances category (36 notifications) (Figure 3).

**Figure 2: Number of hazardous substances notifications, by substance category, 2015**



**Figure 3: Number of hazardous substances notifications, by substance category, 2014**



Source for Figure 2 and Figure 3: Hazardous Substances Disease and Injury Reporting Tool (2015)

### Household chemicals were the most common cause of hazardous substances injury for children under five years

In 2015, there were five notifications for children under the age of five years. One child was admitted to hospital after being exposed to an industrial cleaning product. Household chemicals were the most common cause of injury in this age group. These included Jif and DampRid .

There were seven notifications for children under the age of five years in 2014, three of which required hospital admission. Household chemicals were the most common cause of injury in this age group. These included Ajax, drain unblocker, Crew Smart Dose Cleaner, dishwasher tablet, and organoil (furniture oil).

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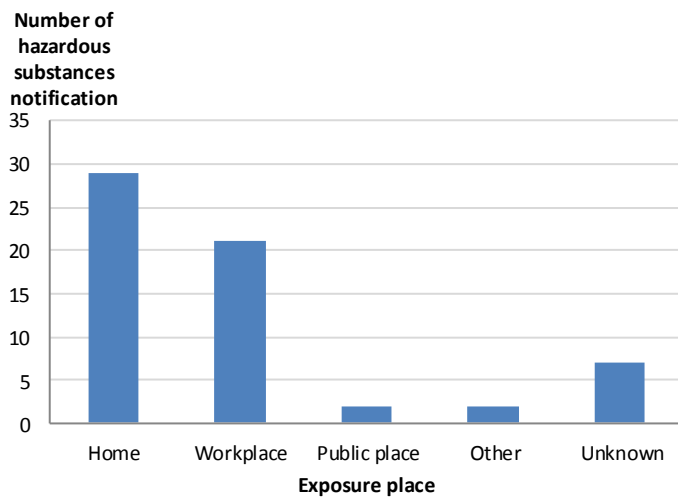
### Most hazardous substances injuries occurred at home

The highest number of hazardous substances injuries occurred at home, followed by workplaces.

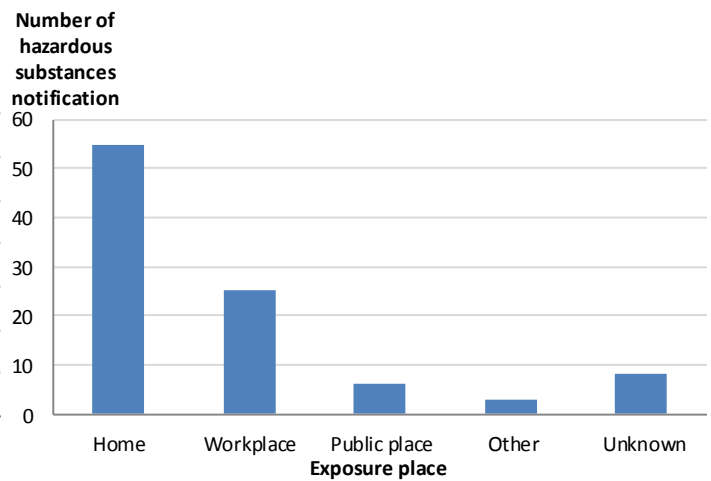
In 2015, nearly half (29 notifications) of the hazardous substances notifications occurred at home (Figure 4). Over one third (21 notifications) of the notifications occurred at workplaces. Two notifications were exposed to hazardous substances in public places.

In 2014, over half (55 notifications) of hazardous substances notifications were due to exposures at home (Figure 5). Over a quarter (25 notifications) of the notifications occurred at workplaces. Six notifications were exposed to hazardous substances in public places.

**Figure 4: Number of hazardous substances notifications, by exposure place, 2015**



**Figure 5: Number of hazardous substances notifications, by exposure place, 2014**



Note: More than one exposure place can be recorded for a single notification

Source for Figures 4 and Figure 5: Hazardous Substances Disease and Injury Reporting Tool (2015)

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**REFERENCES:**

- Ministry for Business, Innovation, and Employment. (2013). *Work-related Disease in New Zealand*. Wellington, New Zealand.