

Hazardous substances notifications

HIGHLIGHTS:

- There were 104 hazardous substances notifications in 2016, compared to 61 in 2015.
- 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 chemicals 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 104 and 61 hazardous substances notifications in 2016 and 2015 respectively

There were 104 hazardous substances notifications in 2016, a increase from 61 notifications in 2015 (Table 1).

Table 1: Number of hazardous substances notifications, by gender, 2015 & 2016

Gender	Number of hazardous substances notifications	
	2016	2015
Female	34	27
Male	67	33
Unknown	3	1
Total	104	61

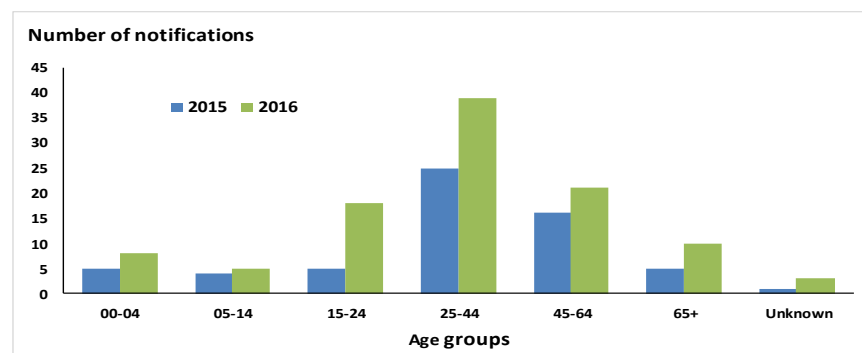
Males were the most affected

Over half of the hazardous substances notifications were among males, both in 2015 and 2016 (Table 1).

Rise in notifications for 15–44 age groups

In 2016 the 25–44 year group had the highest number of hazardous substances notifications (39 notifications, 38% of total). A similar trend was seen in 2015 where 41 percent (25 notifications) of notifications were in the 25-44 age group. (Figure 1).

Figure 1: Number of hazardous substances notifications, by age group, 2015 - 2016



In 2016, there has been a rise in hazardous substance notifications in most age groups, particularly among those aged 15-44 years. (260% increase for the 15- 24 age group and a 56% increase for the 25- 44 age group)

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 (2016)

Hazardous substances notifications

European/Other ethnic group accounted for the highest number of notifications (67 notifications in 2016, and 38 notifications in 2015) (Table 2).

Table 2: Number of hazardous substances notifications, by ethnicity, 2015 & 2016

Ethnicity	Number of notifications	
	2016	2015
Māori	11	6
Pacific	7	4
Asian	4	2
European/Other	67	38
Unknown	15	11
Total	104	61

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 (2016)

Most notifications were from unintentional exposures

In 2016, 77 percent (80 notifications) of hazardous substances notifications were from unintentional exposures and the most common substances category was industrial chemicals (46 notifications), followed by household chemicals (28 notifications) (Figure 2). A similar trend was seen in 2015, where 84 percent (51 notifications) of notifications were from unintentional exposure. Industrial chemical was also the most common substances category (25 notifications) in 2015 (Figure 3).

Figure 2: Number of hazardous substances notifications, by substance category, 2016

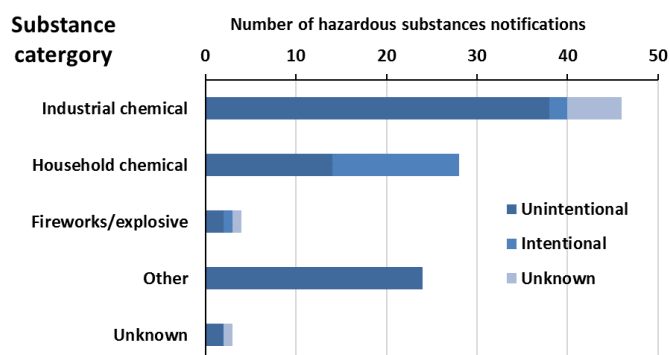
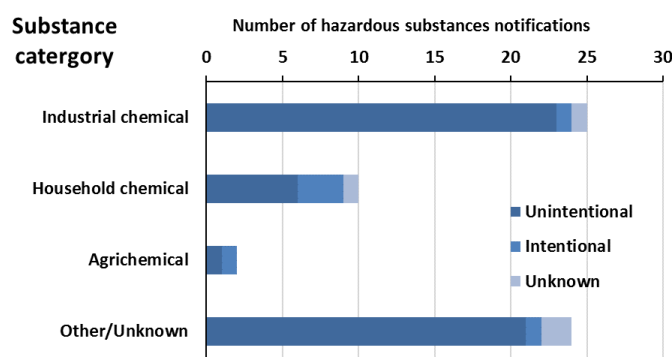


Figure 3: Number of hazardous substances notifications, by substance category, 2015



Source for Figure 2 and Figure 3: Hazardous Substances Disease and Injury Reporting Tool (2016)

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

In 2016, there were eight notifications for children under the age of five years. Exposure to household chemicals was the most common cause of injury in this age group. These included ethanol-based hand sanitiser, washing powder, sodium hypochlorite (Exit Mould), liquid oven cleaner and Dettol.

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

Hazardous substances notifications

Most hazardous substances injuries occurred at home

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

In 2016, forty percent (42 notifications) of the hazardous substances notifications occurred at home (Figure 4). Thirty percent (31 notifications) of the notifications occurred at workplaces. Five notifications were exposed to hazardous substances in public places.

In 2015, nearly half (29 notifications) of the hazardous substances notifications occurred at home (Figure 5). Over one third (21 notifications) of the notifications occurred at workplaces. Two notifications were exposed to hazardous substances in public places.

Figure 4: Number of hazardous substances notifications, by exposure place, 2016

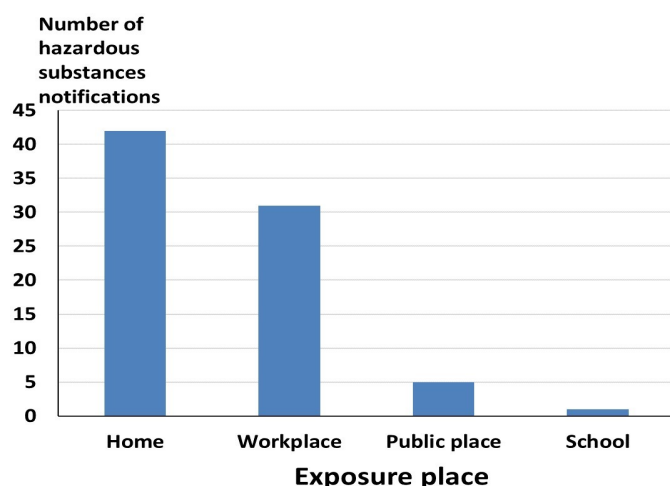
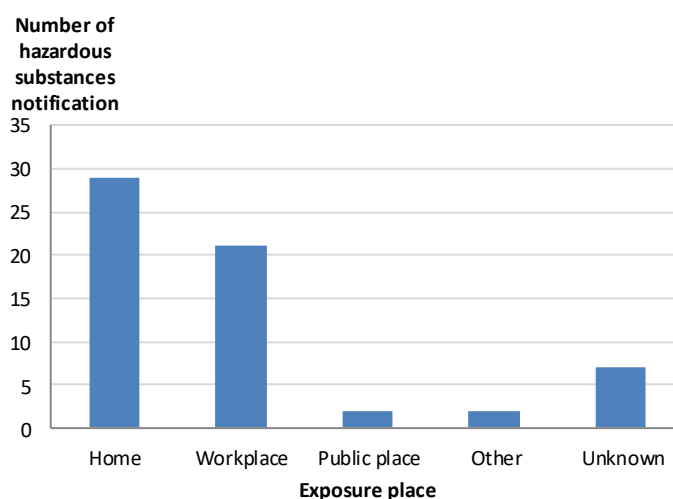


Figure 5: Number of hazardous substances notifications, by exposure place, 2015



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 (2016)

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REFERENCES:

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