

Hazardous substances notifications

HIGHLIGHTS:

- Hazardous substance notifications did not significantly increase between 2014 and 2017
- More than half of the notifications were for males.
- Most notifications involved household chemicals
- 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

A hazardous substance is anything that can explode, catch fire, oxidise, corrode or be toxic to humans, as defined in the Hazardous Substances and New Organisms Act 1996. This definition does not include medicines in finished dose form, alcohol other than industrial alcohol, or radioactive materials. 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. 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).

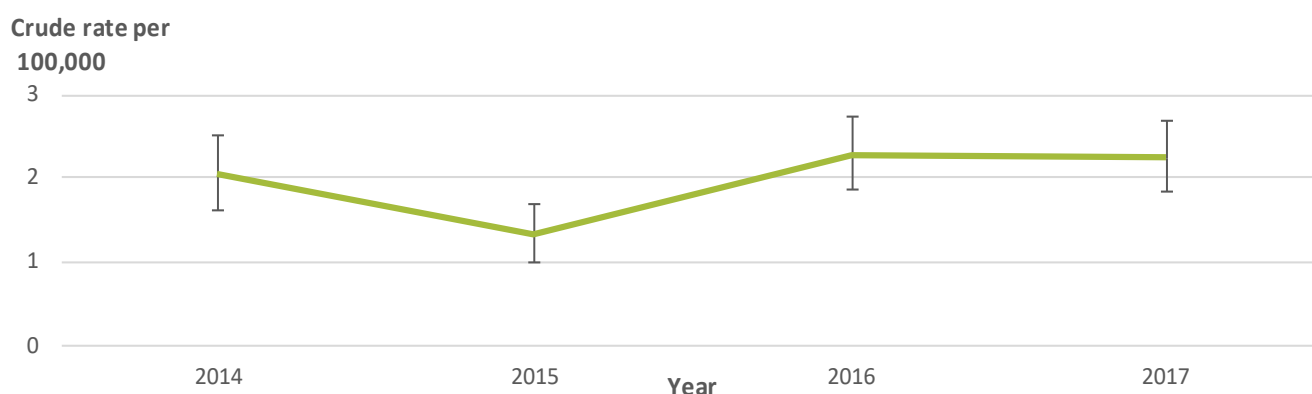
Exposure to hazardous substances can occur through various pathways, including:

- breathing in contaminated air and dust
- ingesting contaminated water and food
- skin exposure to chemicals

Hazardous substances notification rate in 2017 was similar that in 2016

There were 107 Hazardous substance notifications in 2017 (2.2 per 100,000) compared with 106 notifications in 2016 (2.3 per 100,000) (Figure 1).

Figure 1: Hazardous substances notification rate, 2014 - 17



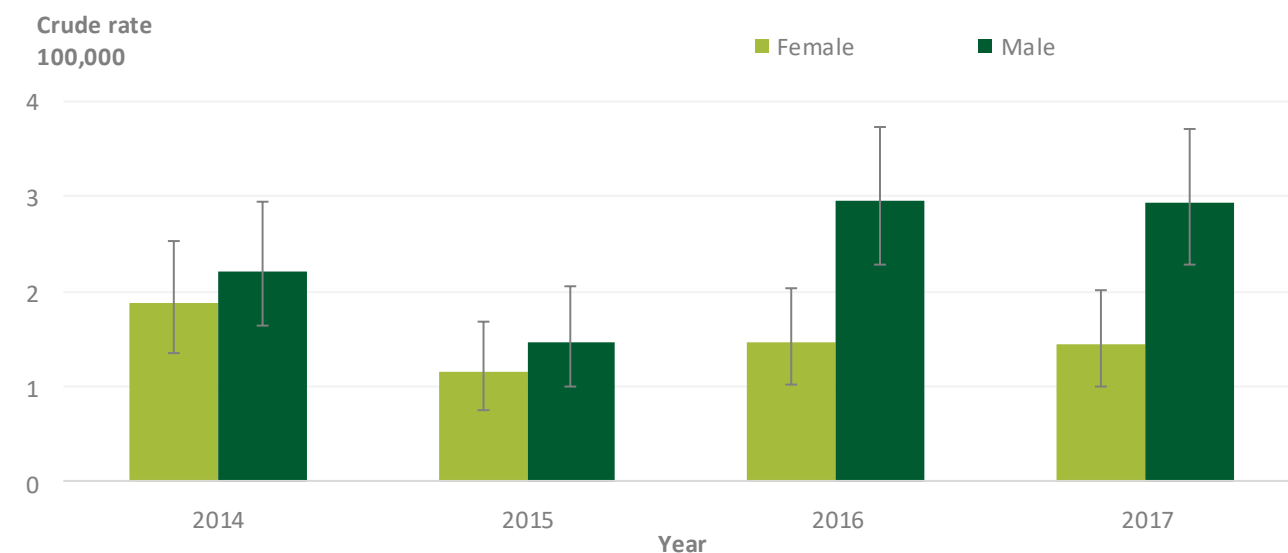
Source: HSDIRT

Hazardous substances notifications

More than half of the notifications were for males

From 2014-17, the majority (62%) of all hazardous substances notifications were males (254 notifications). In 2017 the hazardous substances notification rate was significantly higher for males (2.9 per 100,000; 69 notifications) than for females (1.4 per 100,000; 35 notifications) (Figure 2).

Figure 2: Hazardous substances notification rate, by sex, 2014 - 17

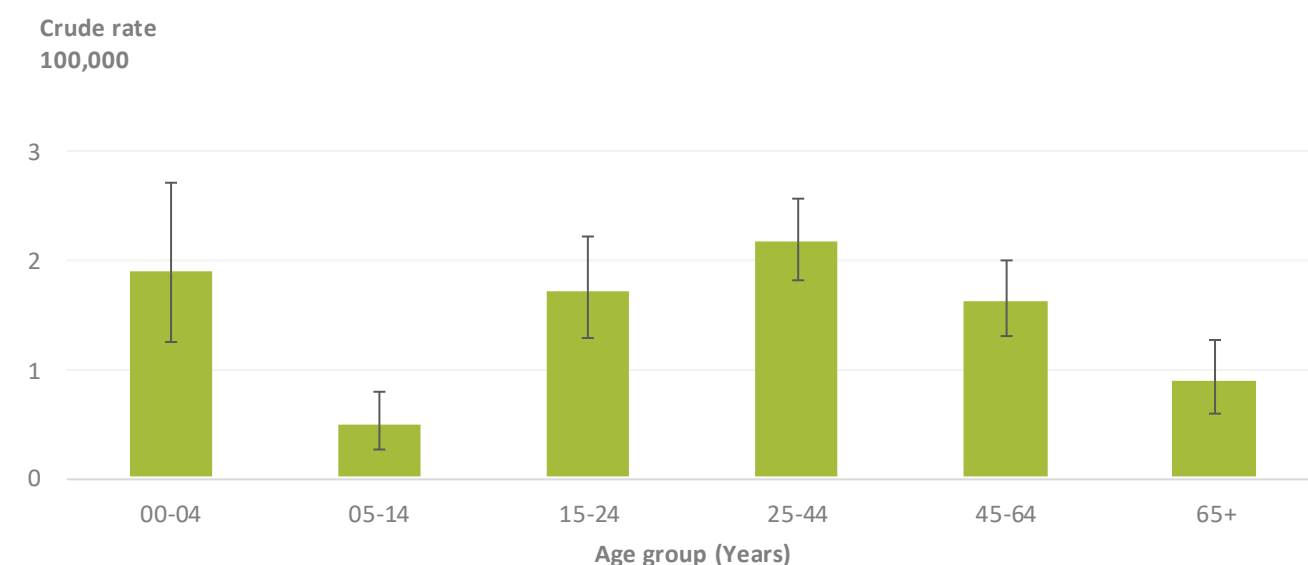


Source: HSDIRT

People aged 25–44 years have the highest notification rate

In 2017, the most common age groups were 25-44 years (40 notifications) and 45-64 years (29 notifications). In the four-year period 2014–17, the highest notification rate was among people aged 25–44 years (18.1 per 100,000; 129 notifications), followed by 15-24 years (1.7 per 100,000; 56 notifications) (Figure 3).

Figure 3: Hazardous substances notification rate, by age group, 2014 - 17



Source: HSDIRT

Hazardous substances notifications

Highest notifications for European/Others

In 2017, the most common ethnic group was European/Other with 52 notifications. In the 2014-17 period, the most common ethnic group was European/Other with 205 notifications, followed by Māori with 34 notifications.

Table 1: Number of hazardous substances notifications, by ethnic group, 2014 - 17

Ethnicity	Number of notifications
Asian	19
European/Other	205
Maori	34
Pacific	20
Unknown	88
Total	366

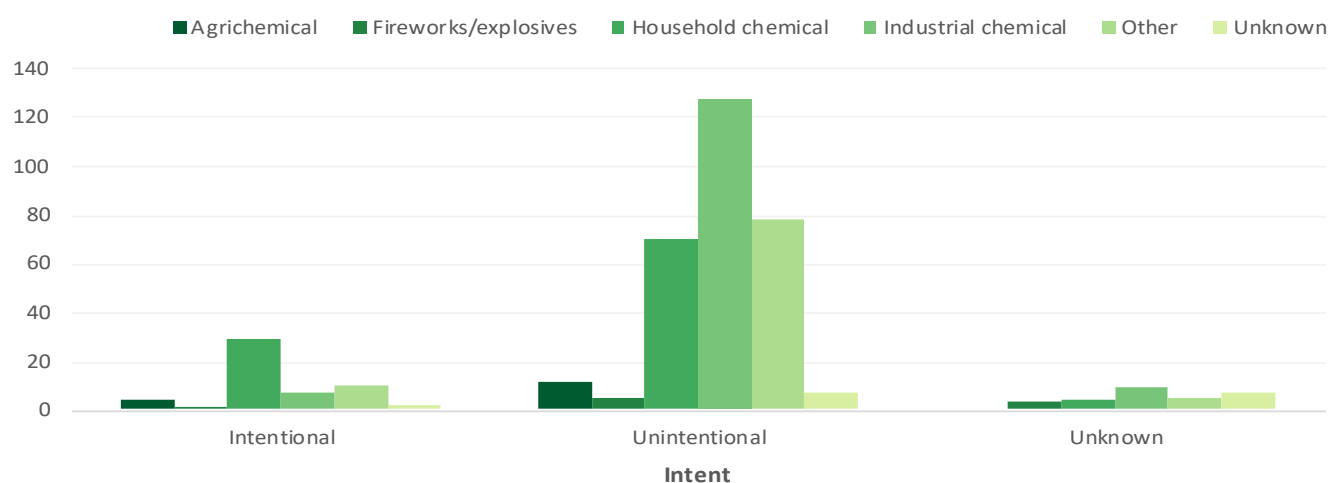
Source: HSDIRT

Most notifications were from unintentional exposures

In 2014-17 Eighty percent (86 notifications) of hazardous substances notifications were from unintentional exposures. The most common substance category reported was household chemical (52 notifications), followed by industrial chemical (37 notifications). In 2017, the most common substance category reported was household chemicals (52 notifications), followed by industrial chemicals (37 notifications) (Figure 4).

Figure 4: Number of Hazardous substances notifications, by substance category, 2014-17

Number of hazardous substances notifications



Source: HSDIRT

Hazardous substances notifications

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

There were 14 hazardous substances notifications for children under the age of five years in 2017, compared to eight in 2016. Household chemicals were the most common cause of injury in this age group. These included bleach, drain cleaner, fly spray, hand sanitizer, laundry detergent, petrol and rat poison

Most hazardous substances injuries occurred at home

Home was the most common place where hazardous substances injury occurred in 2014-2017 (172 notifications), followed by workplaces (113 notifications), public places (18 notifications) and then schools/ECC (4 notifications).

There were three suspected agrichemical spray-drift notifications in 2017

There were three suspected agrichemical spray-drift notifications in 2017, compared to five notifications in 2016 and four notifications in 2015. Two were females.

All three notifications were in the 45-64 year age group and linked to the same event involving exposure to triadimenol. All three notifications were classified by the PHU as 'insufficient info to assign case status'.

FURTHER INFORMATION AND RELATED INDICATORS

Related environmental health indicators for Hazardous Substances are available from the [EHINZ website](#).

DATA FOR THIS INDICATOR

This indicator presents lead notifications from Hazardous Substances Disease and Injury Reporting Tool (HSDIRT). Rate are presented per 100,000 population. Cases that were recorded as "Not a case" or exposure to substances not subject to the HSNO Act were excluded from the analysis. Additional information for this indicator is available in the [Metadata sheet](#).

REFERENCES:

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

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