Second-hand smoke exposure in the home

This report presents information from the 2024/25 New Zealand Health Survey (NZHS) on the prevalence of second-hand smoke exposure in the home among children and adults.

Key facts

- Around 13,000 children aged 0–14 years and 157,000 adults were exposed to second-hand smoke in the home in 2024/25.
- Exposure to second-hand smoke for children has decreased considerably from 5.2% in 2012/13 to 1.3% in 2024/25. Second-hand smoke exposure among adults has decreased between 2012/13 (7.8%) and 2023/24 (3.6%).
- Young people aged 15–24 years, Māori children and adults had the highest exposure to second-hand smoke.
- Adults living in the most deprived neighbourhoods (NZDep2018 quintile 5) were 6.17 times as likely to be exposed to second-hand smoke in the home than those in the least deprived areas.

Second-hand smoke is harmful to health

Second-hand smoke is a major cause of indoor air pollution in New Zealand. Second-hand smoke comes from two places: smoke breathed out by the smoker, and smoke smouldering from the end of the burning cigarette.

Exposure to second-hand smoke causes premature death and illness in both children and adults. In children, second-hand smoke can cause sudden unexpected death in infancy (SUDI), asthma, middle ear infections (otitis media), lower respiratory infections and low birth-weight. In adults, exposure to second-hand smoke can cause lung cancer, ischaemic heart disease and stroke (US Department of Health and Human Services 2014, US Surgeon General 2006).

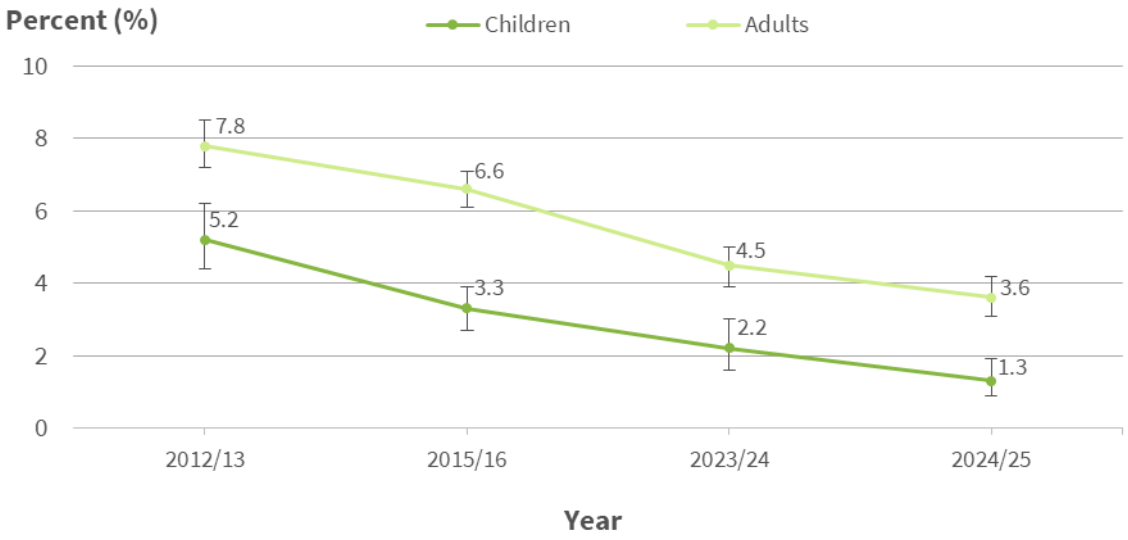
Around 13,000 children aged 0–14 years and 157,000 adults were exposed to second-hand smoke in their home

In 2024/25, 1.3% (95%CI 0.9–1.9), of children were exposed to second-hand smoke in the home, equating to 13,000 children. This rate is one-third the prevalence among adults aged 15 and over exposed to second-hand smoke(3.6% (95%CI 3.1–4.2). The number of adults exposed to second-hand smoke was 157,000.

Second-hand smoke exposure has fallen in the last twelve years

The percentage of children exposed to second-hand smoke has continued to decline, falling from 5.2% (95%CI 4.4–6.2) in 2012/13 to 1.3% (95%CI 0.9–1.9) in 2024/25. Similarly, among adults, the prevalence decreased from 7.8% (95%CI 7.2–8.5) in 2012/13 to 3.6% (95%CI 3.1–4.2) in 2024/25. Overall, exposure rates in both children and adults in 2024/25 were statistically significantly lower than in 2012/13 (Figure 1).

Figure 1: Exposure to second-hand smoke in the home among children and adults (15+ years), 2012/13, 2015/16, 2023/24, and 2024/25



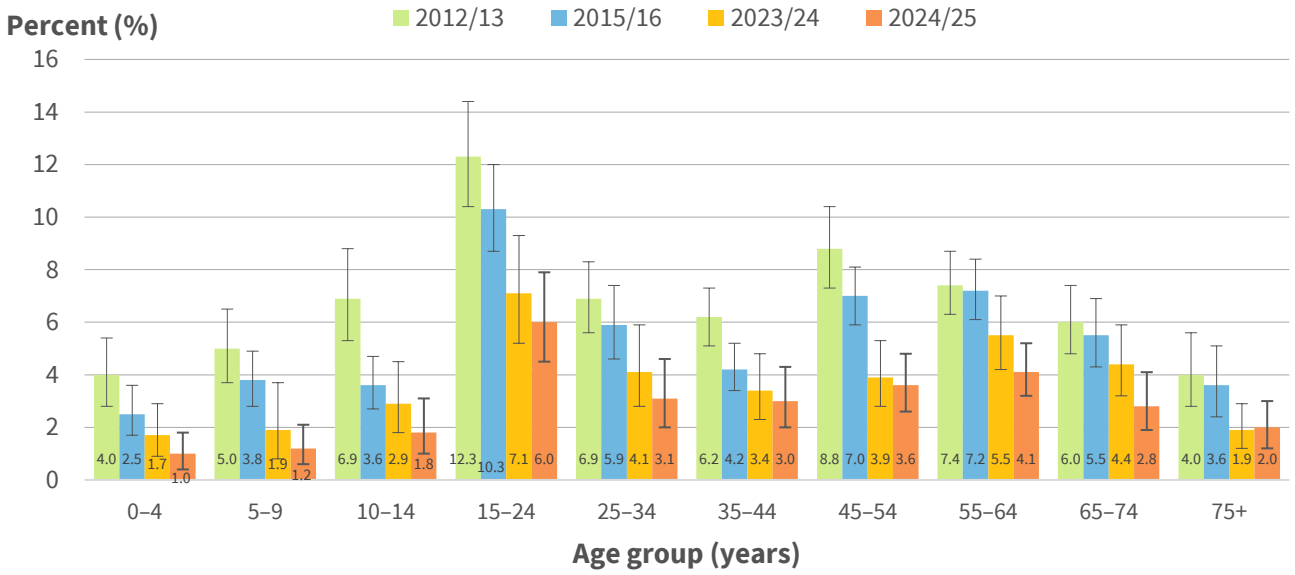
Notes: 95% confidence intervals have been presented as vertical bars
Source: New Zealand Health Survey, Ministry of Health 2025

Younger people are the most exposed

In 2024/25, second-hand smoke exposure in the home continued to be highest among younger people 15-24 years (6.0%, 95% CI 4.5–7.9), although rates declined compared with 2023/24 (7.1%, 95% CI 5.2–9.3)(Figure 2). From 2015/16 to 2024/25, the most significant declines in second-hand smoke exposure were observed among adults 15-24 years, followed by those 45-54 years.

In children, second-hand smoke exposure was similar between boys (1.4%, 95%CI 0.8–2.3) and girls (1.3%, 95%CI 0.8–2.0). Second-hand smoke exposure rates were higher in adult men (4.2%, 95%CI 3.5–5.0) than in women (3.0%, 95%CI 2.4–3.6). Have these rates changed from the previous year?

Figure 2: **Exposure to second-hand smoke in the home among children aged 0–14 years and adults (15+ years), by age group, 2012/13, 2015/16, 2023/24 and 2024/25 (unadjusted prevalence)**



Notes: 95% confidence intervals have been presented as vertical bars
Source: New Zealand Health Survey, Ministry of Health 2025

Both Māori children and adults are more likely to be exposed to second-hand smoke

The unadjusted second-hand smoke exposure in the home was highest in Māori children (2.2%, 95% CI 1.4–3.2) and Māori adults (7.0%, 95% CI 5.5–8.7) (Table 1).

Table 1: Exposure to second-hand smoke in the home, by ethnic group, 2024/25 (unadjusted prevalence and estimated number of people)

Ethnic group (total response)	Unadjusted prevalence (%, 95%CI)		Estimated number of children	
	Children	Adults	Children	Adults
Total	1.3 (0.9–1.9)	3.6 (3.1–4.2)	13,000	157,000
Māori	2.2 (1.4–3.2)	7.0 (5.5–8.7)	6,000	46,000
Pacific	2.0 (1.0–3.7)[a]	6.8 (4.6–9.6)	3,000	20,000
Asian	1.4 (0.4–3.4)[a]	2.9 (1.7–4.4)	3,000	22,000
European/Other	0.9 (0.5–1.3)	3.0 (2.5–3.7)	5,000	94,000

Note: 95% confidence intervals (CI) are given in brackets. Estimated numbers will add to more than the total for ethnic groups due to total response ethnic groups being used (where everyone is included in every ethnic group they report).
[a] This estimate has a relative standard error of >30% and should be used with caution.

Source: New Zealand Health Survey, Ministry of Health 2025

Māori and Pacific children and adults were more likely to be exposed to second-hand smoke than non-Māori and non-Pacific, respectively. After adjusting for age and sex, Maori children were statistically significantly 2.15 times as likely as non-Maori children to be exposed to second-hand smoke in the home. Similarly, Māori adults were statistically significantly 2.17 times as likely as non-Māori adults to be exposed to second-hand smoke, while Pacific adults were 1.94 times as likely as non-Pacific adults to be exposed to second-hand smoke (Table 2).

Table 2: Exposure to second-hand smoke, by ethnic group, 2024/25 (adjusted rate ratio)

Comparison groups for adjusted rate ratio	Adjusted rate ratio (RR, 95%CI)^	
	Children	Adults
Māori vs non-Māori	2.15 (1.13–4.11)*	2.17 (1.6–2.93)*
Pacific vs non-Pacific	1.71 (0.76–3.82)	1.94 (1.34–2.81)*
Asian vs non-Asian	1.10 (0.35–3.45)	0.73 (0.44–1.21)

Note: 95% confidence intervals (CI) are given in brackets. Estimated numbers will add to more than the total for ethnic groups due to total response ethnic groups being used (where everyone is included in every ethnic group they report).
^ Rate ratios (RR) are used to compare results for different population subgroups. Adjusted rate ratios are used to control for age and sex differences that could influence the comparison. An adjusted rate ratio above 1.0 shows that the indicator is more likely in the group of interest (eg, Māori) than in the comparison group (eg, non-Māori). An adjusted ratio below 1.0 shows the indicator is less likely in the group of interest than the comparison group.
* Indicates that the adjusted ratio is statistically significant.

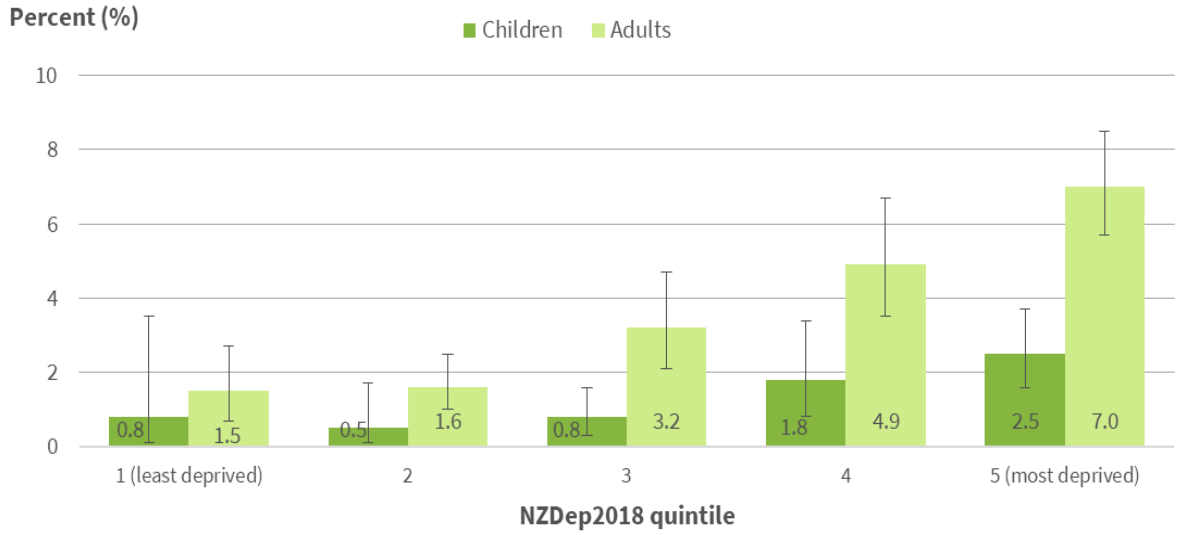
Source: New Zealand Health Survey, Ministry of Health 2025

Children and adults in the most deprived areas had the highest exposure to second-hand smoke

Children (2.5%, 95% CI 1.6–3.7) and adults (7.0%, 95% CI 5.7–8.5) living in the most socioeconomically deprived areas (NZDep2018 quintile 5) were more likely to be exposed to second-hand smoke in the home than those living in the least deprived areas (quintile 1) in 2024/25 (Figure 3).

After adjusting for age, sex, and ethnic differences, adults living in the most deprived areas (NZDep2018 quintile 5) were statistically significantly six times (adjusted rate ratio 6.17, 95% CI 3.55–10.72) more likely to be exposed to second-hand smoke in their home as those in the least deprived areas (quintile 1).

Figure 3: Exposure to second-hand smoke in the home, among children and adults, by neighbourhood deprivation (NZDep2018 quintiles), 2024/25 (unadjusted prevalence)

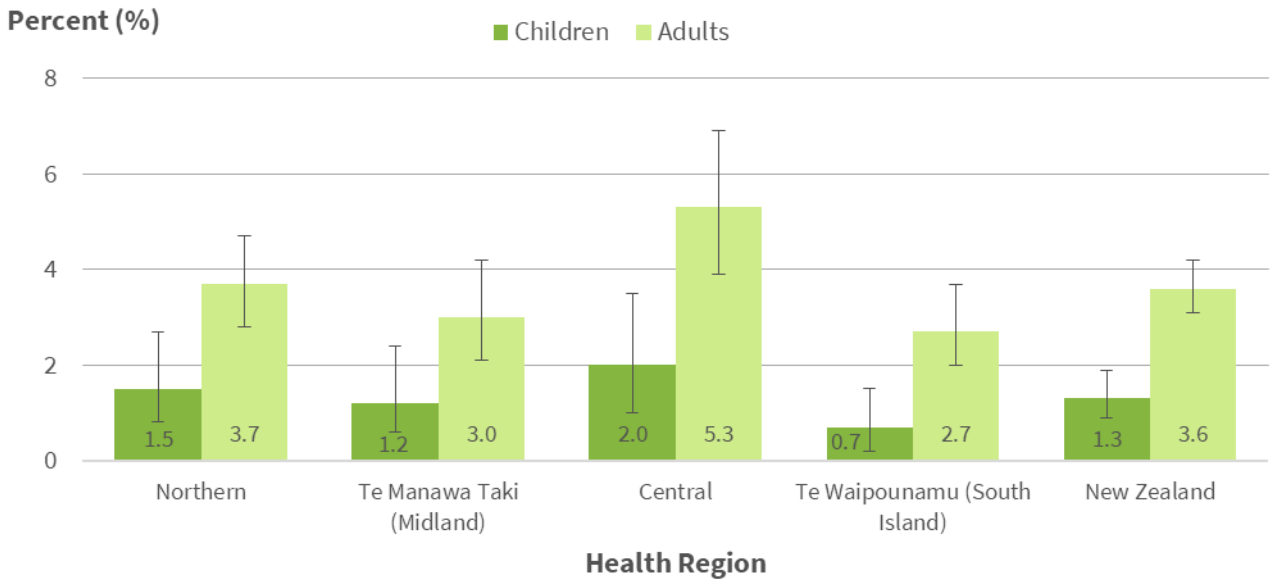


Notes: 95% confidence intervals have been presented as vertical bars
Source: New Zealand Health Survey, Ministry of Health 2025

Adults consistently show higher exposure to second-hand smoke than children across health regions

The latest NZHS results include estimates by health region, rather than districts (formerly District Health Boards). A map showing the areas covered by each health region is available on the Health NZ–Te Whatu Ora website. The percentage of adults exposed to second-hand smoke is higher than that of children across all health regions. Moreover, the percentage of children exposed in Te Waipounamu is notably low. (Figure 4).

Figure 4: Exposure to second-hand smoke in the home, among children and adults, by health region, 2024/25



Notes: 95% confidence intervals have been presented as vertical bars. The four health regions (and the districts they cover) are: Te Waipounamu (Canterbury, West Coast, Nelson Marlborough, Southern and South Canterbury), Central (MidCentral, Whanganui, Capital & Coast/Hutt Valley, Hawkes Bay and Wairarapa), Te Manawa Taki (Waikato, Bay of Plenty, Lakes, Tairāwhiti and Taranaki), and Northern (Northland, Waitematā, Auckland and Counties Manukau).
Source: New Zealand Health Survey, Ministry of Health 2025

Data for this indicator

The **Second-hand smoke exposure** indicator contains the most recent data available from the 2024/25 New Zealand Health Survey published by the Ministry of Health in November 2025. The Ministry of Health calculated all the results.

Crude rates presented in this factsheet do not take into account varying age distributions when comparing between populations. Rate ratios are presented to 2 decimal places.

All 95% confidence intervals have been presented as vertical bars on graphs.

For additional information, see the Metadata sheet.

References

Ministry of Health. 2025. New Zealand Health Survey. Annual Data Explorer. URL: https://minhealthnz.shinyapps.io/nz-health-survey-2024-25-annual-data-explorer/ (Accessed 19/12/2025)

US Department of Health and Human Services. 2014. The Health Consequences of Smoking – 50 Years of Progress. A Report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention.

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