

Second-hand smoke exposure in the home (0–14 years)

HIGHLIGHTS:

- In 2012/13, about 45,000 children aged 0–14 years (5.0%) were exposed to second-hand smoke in their home.
- The percentage of children exposed to second-hand smoke in their home has dropped from 9.6% in 2006/07 to 5.0% in 2012/13.
- Second-hand smoke exposure was more common among Māori (9.2%) and Pacific (6.4%) children than among European/Other (4.1%) and Asian (2.3%) children.
- One in ten children (10.7%) living in the most deprived areas (NZDep2006 quintile 5) were exposed to second-hand smoke in their home, compared with 1.4% of children living in the least deprived areas (quintile 1).



Relevance of second-hand smoke exposure to child 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 from the end of the burning cigarette.

Exposure to second-hand smoke causes premature death and illness. In children, second-hand smoke can cause sudden unexpected death in infancy (SUDI), asthma, lower respiratory tract infections and middle ear infections (otitis media), as well as low birth-weight in babies whose mother was exposed to second-hand smoke while pregnant (US Department of Health and Human Services, 2007).

Data for this indicator

The New Zealand Health Survey collects information on children exposed to second-hand smoke in their home. This factsheet reports data for 2006/07 and 2012/13 for children aged 0–14 years.

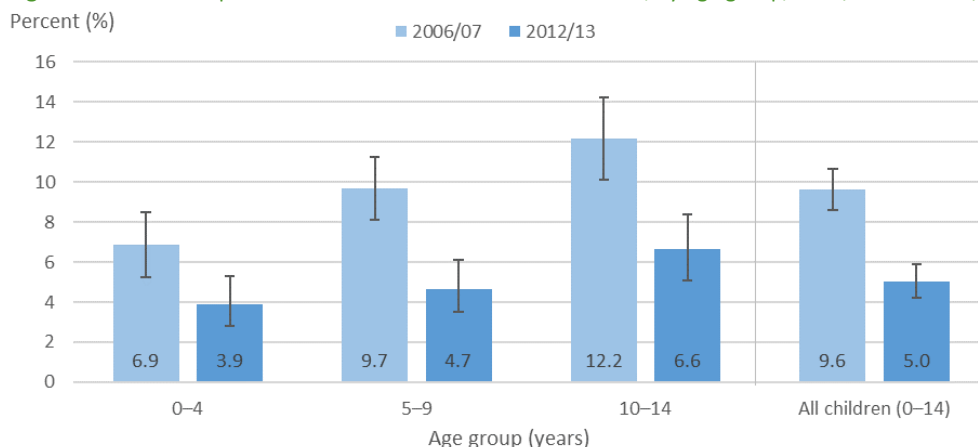
About 45,000 children exposed to second-hand smoke in their home in 2012/13

In 2012/13, 5.0% of children aged 0–14 years were exposed to second-hand smoke in their home (95% confidence interval: 4.2–5.9). This is about 45,000 children.

Large decrease in second-hand smoke exposure since 2006/07

The percentage of children exposed to second-hand smoke at home almost halved between 2006/07 (9.6%) and 2012/13 (5.0%). There were substantial drops for all age groups over this time (Figure 1). In 2012/13, 6.6% of children aged 10–14 years were exposed to second-hand smoke in their home, compared with 3.9% of children aged 0–4 years (Figure 1).

Figure 1 : Children exposed to second-hand smoke in their home, by age group, 2006/07 and 2012/13 (percent)



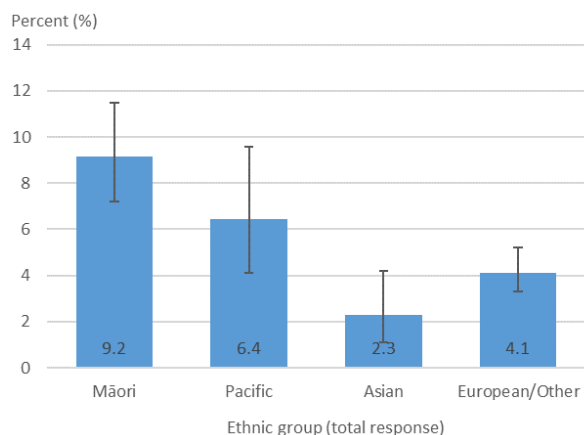
Source: New Zealand Health Survey (2006/07 and 2012/13)

Second-hand smoke exposure in the home (0–14 years)

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

By ethnic group, second-hand smoke exposure in the home was highest among Māori children (9.2%) and Pacific children (6.4%) (Figure 2). Māori children were about 2.6 times as likely to be exposed to second-hand smoke in their home as non-Māori, adjusting for age and sex differences (Table 1). Asian children were much less likely to be exposed to second-hand smoke in their home than other children (Figure 2 and Table 1).

Figure 2: Children exposed to second-hand smoke in the home, by ethnic group, 2012/13 (percent)



Source: New Zealand Health Survey (2012/13)

Table 1: Children exposed to second-hand smoke in the home, by ethnic group, 2012/13 (percent with 95% CI; estimated number; adjusted rate ratios)

Ethnic group	Exposed to second-hand smoke in their home (%)	Estimated number of children exposed	Adjusted rate ratio (compared with children not in ethnic group, adjusting for age and sex)
Total	5.0 (4.2–5.9)	45,000	–
Māori	9.2 (7.2–11.5)	21,000	2.6 (1.9–3.7)
Pacific peoples	6.4 (4.1–9.6)	8,000	1.4 (0.9–2.1)
Asian	2.3 (1.1–4.2)	2,000	0.4 (0.2–0.9)
European/Other	4.1 (3.3–5.2)	26,000	–

Note: Adjusted rate ratios above 1 show a higher exposure for children in the ethnic group, compared with other children. Total response ethnicity has been used.

Source: New Zealand Health Survey (2012/13)

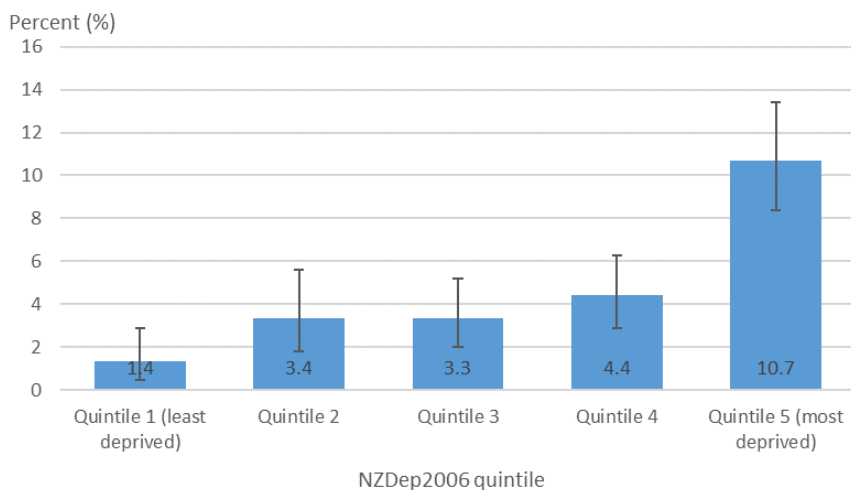
Higher levels of second-hand smoke exposure in more deprived areas

In 2012/13, children living in more socioeconomically deprived areas were more likely to be exposed to second-hand smoke than other children.

One in ten children (10.7%) living in the most deprived areas (NZDep2006 quintile 5) were exposed to second-hand smoke in their home, compared with 1.4% of children living in the least deprived areas (quintile 1) (Figure 3).

Children living in the most deprived areas were almost eight times as likely to be exposed to second-hand smoke in their home as those in the least deprived areas, after adjusting for age, sex and ethnic differences (adjusted rate ratio 7.8, 3.4–17.9).

Figure 3: Children exposed to second-hand smoke in their home, by NZDep2006 quintile, 2012/13 (percent)



Source: New Zealand Health Survey (2012/13)

Second-hand smoke exposure in the home (0–14 years)

DATA SOURCES

Data come from the 2012/13 New Zealand Health Survey data tables (Ministry of Health, 2014). The factsheets presents the unadjusted prevalence, with 95% confidence intervals. For more information about this indicator, see the metadata sheet.

RELATED INDICATORS

A factsheet on second-hand smoke exposure in the home for all ages is also available on the EHINZ website (www.ehinz.ac.nz).

Related environmental health indicators for the indoor environment are also available on the EHINZ website, including:

- Maternal smoking at two weeks postnatal
- Asthma hospitalisations
- Asthma prevalence
- Lower respiratory tract infection hospitalisations
- Sudden unexpected death in infancy (SUDI)
- Meningococcal disease
- Household crowding.

REFERENCES

Ministry of Health. (2014). *Tobacco Use 2012/13: New Zealand Health Survey*. Wellington: Ministry of Health.

US Department of Health and Human Services. (2007). *Children and Secondhand Smoke Exposure. Excerpts from The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health

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