

High and very low smoking prevalence occupations: data from the New Zealand census

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*From vision to reality:
A tobacco-free Oceania*

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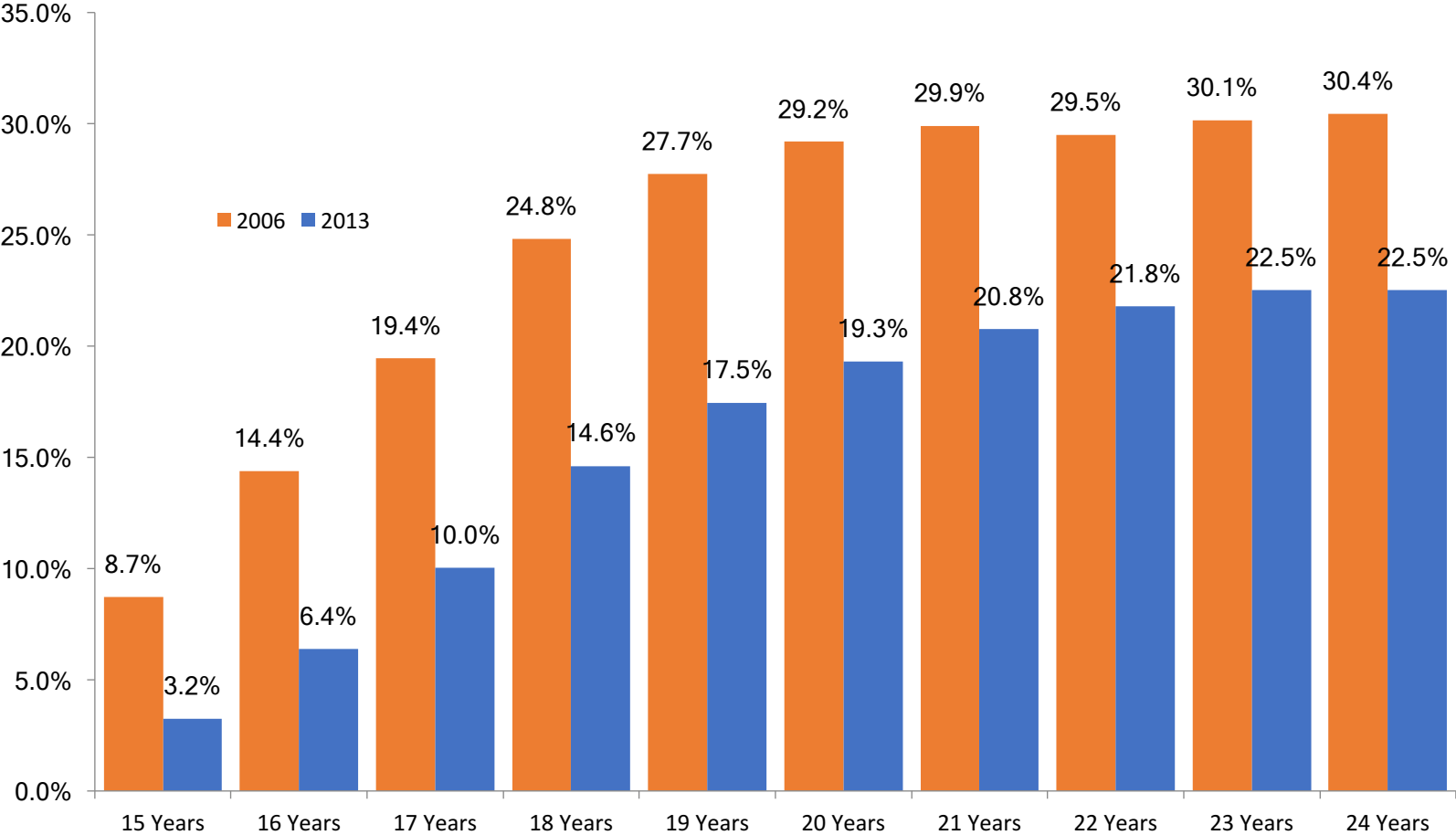
Background



- Slow progress towards Smokefree Aotearoa 2025 goal, particularly for Māori and Pacific peoples
- Very little investigation in NZ of workplaces as a setting for intervention to reduce smoking uptake and support cessation
- High prevalence workplaces could be important site for interventions to reduce young adult uptake
- Smoking (or non-smoking) in some occupations could have wider role-modelling impact
- Good evidence that cessation interventions in workplace settings can be effective

Cahill K, Lancaster T. Workplace interventions for smoking cessation. Cochrane Database of Systematic Reviews 2014

Smoking prevalence in young adults, 2006 and 2013 NZ Census



Young Māori women smokers and smoking at work

“I find that when I’m at work I tend to smoke more. At my workplace, they smoke so much, it’s not even funny. If I put all the smoke breaks together, that’s like almost two hours a day.”

“My work mates and I go out on our morning break to catch up. We all have a smoke while we chat.”

“We always go out for a quick smoke break when it’s quiet. There is always someone to smoke with at work.”

Exploring why young Māori women smoke. Ministry of Health, 2017.

Objectives

Explore patterns of smoking and occupation in 2013 NZ census including:

- High and low prevalence occupations
 - focus on Māori and young adults
 - high influence 'role model' occupations

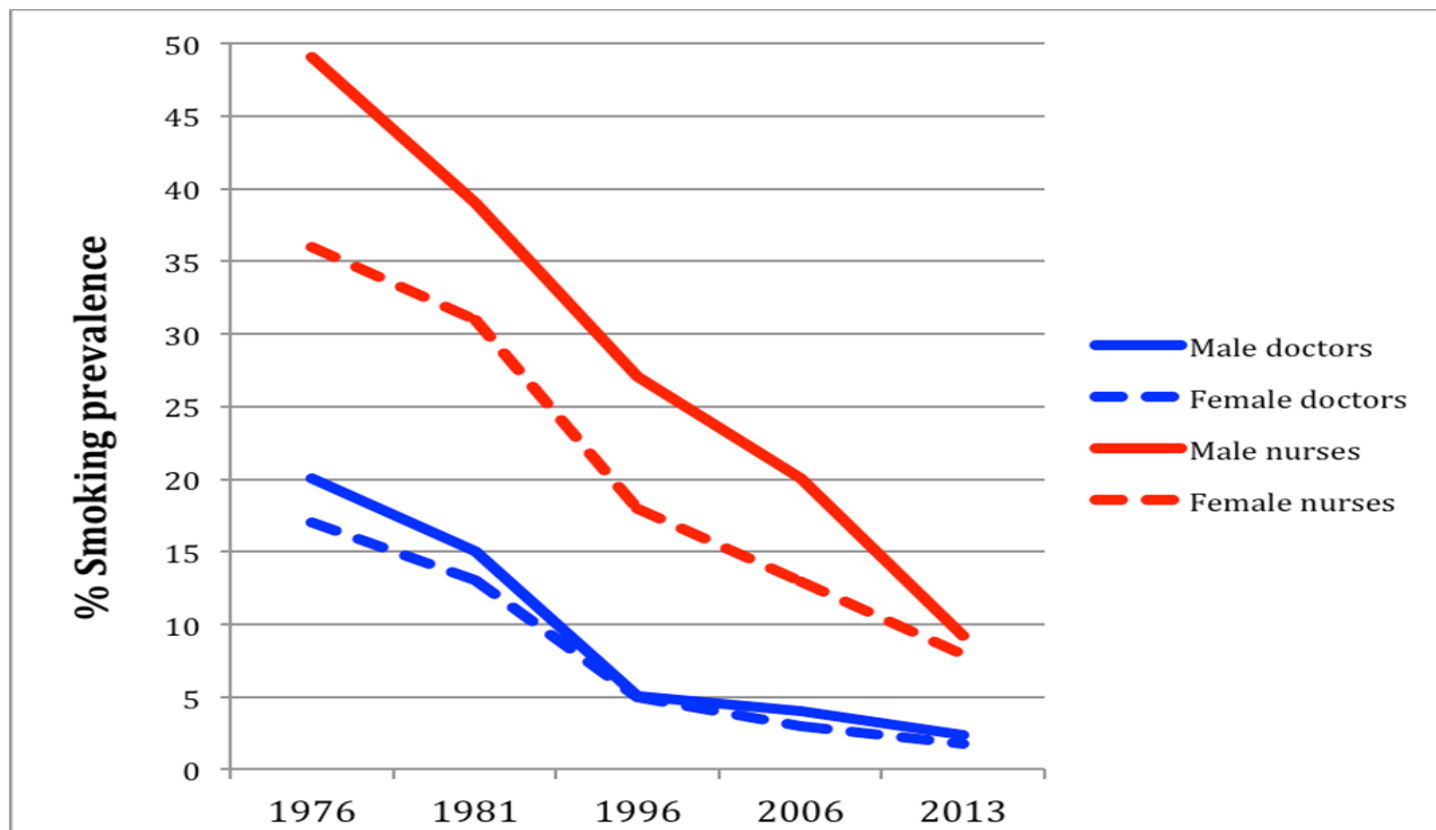
Methods: Smoking and occupation 2013 NZ Census analysis

- Data supplied by Statistics New Zealand
- NZ Census includes questions to assess smoking status – current, ex-, never smoker
- 1.85-1.9m adults with occupational coding
 - coded using 1999 New Zealand Standard Classification of Occupations (NZSCO99) – 3 and 4 digit levels
- Total response ethnicity
- Approx: 277,000 smokers (15% prevalence), including over 64,000 (30% prevalence) Māori
- Crude prevalences calculated for individual occupations overall, for Māori and non-Māori and for 15-24 year olds

Low prevalence occupations

	Smoking prevalence % (n)		Smoking prevalence % (n)
Aircraft Pilots and Related Workers	5 (147)	Judges	3.8 (12)
Geologists and Geophysicists	4.9 (45)	Microbiologists and Related Professionals	3.4 (69)
Philologists, Translators and Interpreters	4.9 (39)	Non-ordained Religious Associate Professionals	2.4 (24)
Mathematicians, Statisticians and Related Professionals	4.6 (39)	Dentists	2.3 (39)
Secondary Teaching Professionals	4.6 (969)	Veterinarians	2.3 (45)
Psychologists and Psychotherapists	4.5 (114)	Medical Doctors	2.1 (267)
Architects and Resource Management Professionals	4.4 (279)	Physicists	1.9 (3)
Meteorologists	4.3 (6)	Other Health Professionals (Except Nursing)	1.9 (12)
Proof-Reading and Related Clerks	4.3 (6)	Religious Professionals	1.8 (66)
Physiotherapists	4.1 (273)	Pharmacists	1.6 (42)
Musical Instrument Makers and Tuners	4 (6)	Dietitians and Public Health Nutritionists	1.5 (9)

Trends in regular cigarette smoking prevalence among doctors and nurses in New Zealand from census data 1976-2013



Smoking prevalence among Māori doctors declined from 9.4% for males and 10.7% for females in 2006 to 7.4% males and 6.5% females in 2013 and for nurses from 33.8% of males and 30.6% of females in 2006 to 18.8% and 19.4%

High influence occupations

	Smoking prevalence: Māori - % (n)	Smoking prevalence: non-Māori - % (n)
Childcare workers	24.2 (237)	9.7 (627)
Early childhood teachers	27.3 (879)	8.5 (1680)
Primary teachers	16.3 (555)	4.7 (1197)
Secondary teachers	10.1 (196)	4.0 (765)
Prison guards	22.4 (165)	17.9 (435)
Armed forces	21.2 (228)	13.2 (498)
Police	14.3 (180)	7.2 (627)
Fire fighters	10.0 (24)	7.0 (150)
Media presenters	22.6 (36)	13.0 (81)
Legislators	11.8 (12)	6.0 (42)
Sportspeople	10.9 (180)	6.4 (672)

Health professionals >5%

	Smoking prevalence: Māori - % (n)	Smoking prevalence: all - % (n)
Nursing associate profs	27.4 (51)	15.2 (273)
Veterinary Assts	18.2 (12)	12.7 (183)
Pharmacy Assts	-	10.9 (18)
Nursing and midwifery	19.3 (507)	8.0 (3132)
Opticians	16.7 (6)	7.9 (51)
Dental Assts	15.6 (15)	6.7 (69)

Smoking prevalence by nursing roles

ASPIRE
2025

	N	Regular smokers %	Ex-smokers %	Never smokers %
Male				
Principal Nurse	153	11.8	33.3	54.9
Registered Nurse	2,469	8.6	27.7	63.8
Psychiatric Nurse	303	14.9	37.6	48.5
Other Nurse	60	5.0	36.7	58.3
Female				
Principal Nurse	1,518	8.9	32.8	58.3
Registered nurse	29,661	7.8	25.0	67.3
Psychiatric Nurse	699	17.6	42.1	40.3
Plunket Nurse	507	7.1	24.3	68.6
Public Health and District Nurse	1,185	6.3	30.4	63.5
Occupational Health Nurse	156	5.8	34.6	61.5
Midwife	2,409	7.2	29.8	62.9
Total				
Principal Nurse	1,674	9.3	32.6	57.9
Registered Nurse	32,130	7.8	25.2	67.0
Psychiatric Nurse	1,002	16.8	41.0	42.5
Plunket Nurse	507	7.1	24.3	69.2
Public Health and District Nurse	1,230	6.3	30.7	63.2
Occupational Health Nurse	159	3.8	35.8	60.4
Midwife	2,415	7.2	29.8	63.0

High prevalence occupations

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2025

	Smoking: Māori - % (n)	Smoking: non-Māori - % (n)
Other agricultural workers	50.8 (894)	21.8 (894)
Fruit growers	47.0 (729)	15.3 (1530)
Meat & fish process machine ops	44.7 (2004)	29.4 (2583)
Forest workers and loggers	44.3 (786)	29.5 (822)
Packers and freight handlers	43.7 (1716)	21.6 (3492)
Caretakers and cleaners	43.7 (2682)	20.1 (6147)
Building and related workers	43.4 (858)	31.5 (2145)
Machine tool operators	42.8 (594)	24.5 (1776)
Lifting truck operators	42.8 (522)	31.2 (972)
Cooks	42.0 (966)	24.2 (4836)
Labourers	41.3 (3957)	25.3 (8898)
Earth mover and related machine ops	40.9 (519)	29.3 (1353)
Painters and paper-hangers	39.0 (603)	27.4 (2913)
Personal care workers	37.4 (2211)	17.8 (6390)

High prevalence occupations (15-24yrs)

ASPIRE
2025

	Smoking: Māori - % (n)	Smoking: non- Māori - % (n)
Other agricultural workers	51.1(267)	19.9 (234)
Forest workers and loggers	47.1 (216)	41.0 (165)
Fruit growers	47.0 (162)	17.9 (165)
Machine tool operators	43.2 (105)	26.8 (213)
Meat & fish process machine ops	43.1 (504)	28.8 (501)
Painters and paper-hangers	42.5 (144)	33.4 (456)
Building and related workers	42.1 (249)	36.8 (495)
Packers and freight handlers	41.5 (489)	20.6 (771)
Livestock producers	41.3 (276)	23.7 (837)
Labourers	38.9 (1074)	25.1 (1815)
...		
Waiters and bar-tenders	26.6 (1176)	13.3 (3135)

Summary

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2025

- Substantial reductions in smoking prevalence in many occupations (<5%), health pros leading the way.
- Findings suggest opportunities for workplace interventions to promote progress to Smokefree 2025
- Some potential “high influence occupations” still have high smoking prevalences overall &/or for Māori within those occupations. Could be priority for cessation interventions e.g.
 - Primary School and early childhood teachers and workers (especially Māori)
 - Psychiatric nurses and nursing assistants
 - Māori nurses
- High prevalence occupations are also possible targets for workplace cessation interventions + uptake prevention (15-24 years)
- May also be opportunities for broader workplace initiatives promoting and supporting Smokefree Aotearoa 2025

NZ Defence Force first military in the world to go smokefree

[Newstalk ZB staff, Audio](#), Wednesday, 31 May 2017, 6:51PM





A Smokefree Aotearoa by 2025

—let's do it for the kids

Kia ora
Thank you

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www.aspire2025.org.nz

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