



Key Results from the ITC Project (New Zealand) – with a Focus on Inequalities and Smoking

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New Zealand



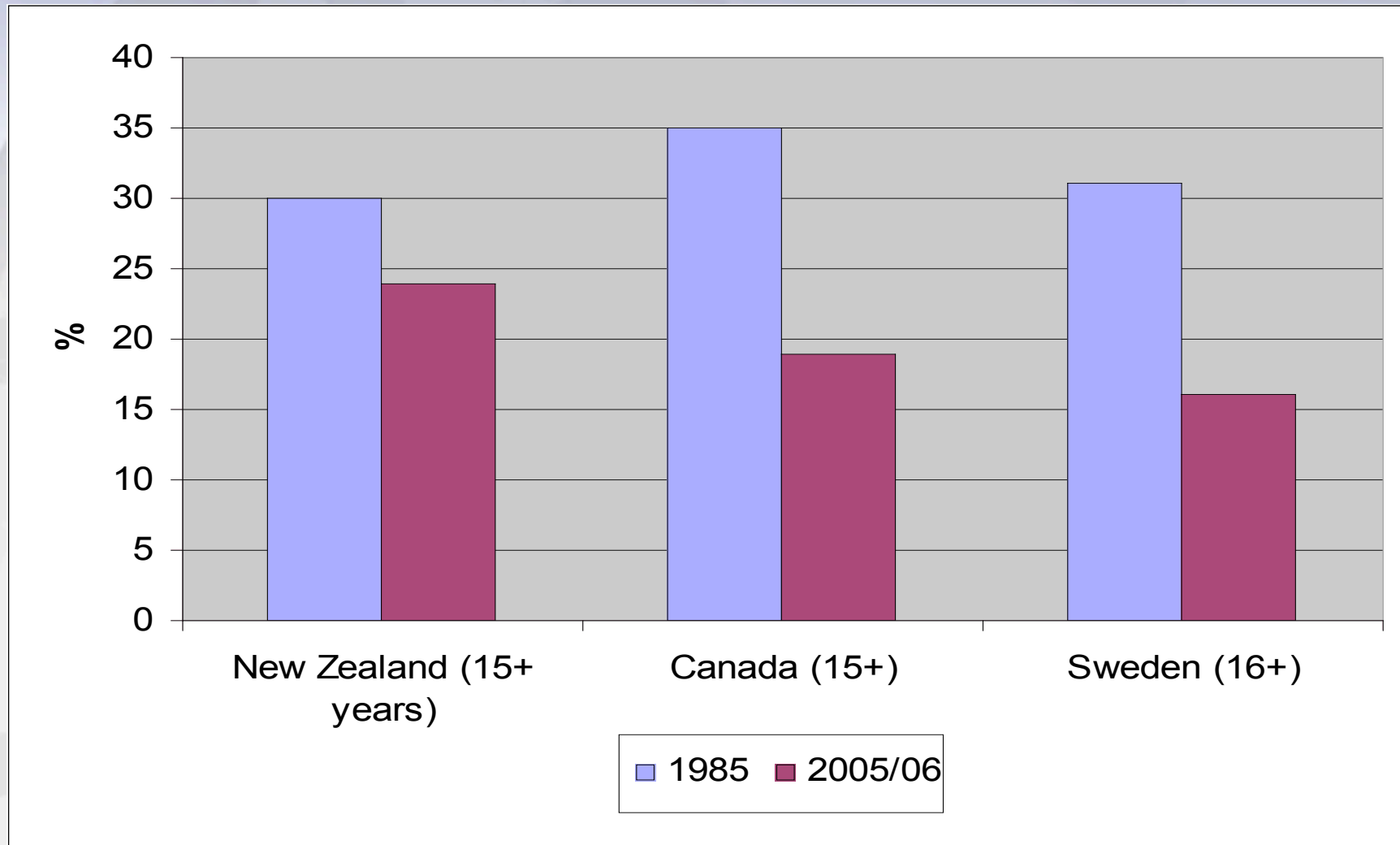
- Upside down
- But 18 hours ahead
- 4 million people and growing
- 40 million sheep and shrinking
- Watch *Flight of the Conchords* to understand the local zeitgeist

Overview

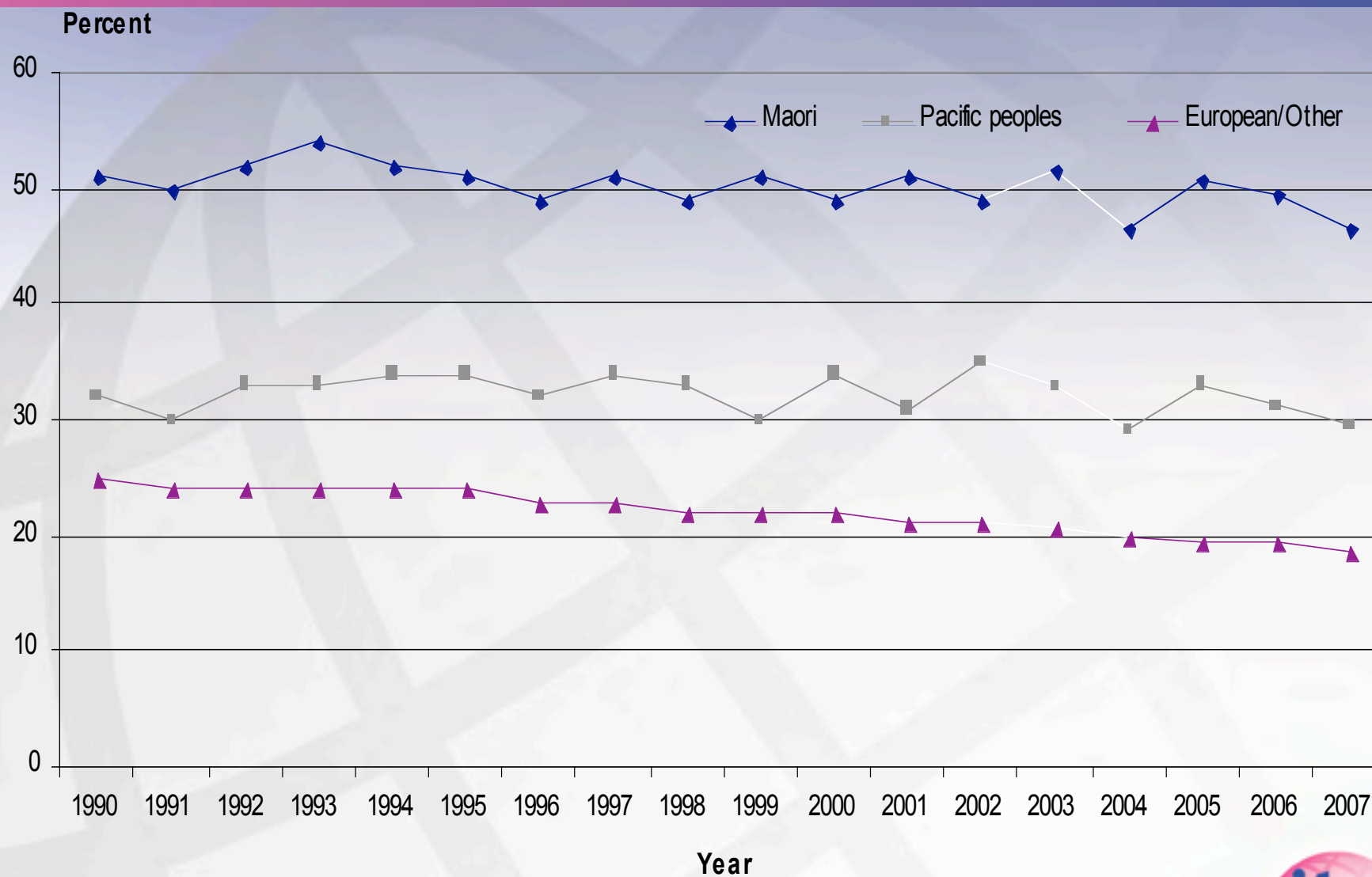
- **Epidemiology – smoking in NZ**
- **Smoker attitudes to tobacco control policies (ethnicity/SES)**
- **Responses to GHWs by ethnicity/SES**
- **Quitting behavior & ethnicity/SES**
- **Other results of note**
- **Impact of ITC Project (NZ) work**
- **Summary**

Epidemiology of smoking in NZ

Adult smoking prevalence in NZ, Canada and Sweden (1985 and 2006)

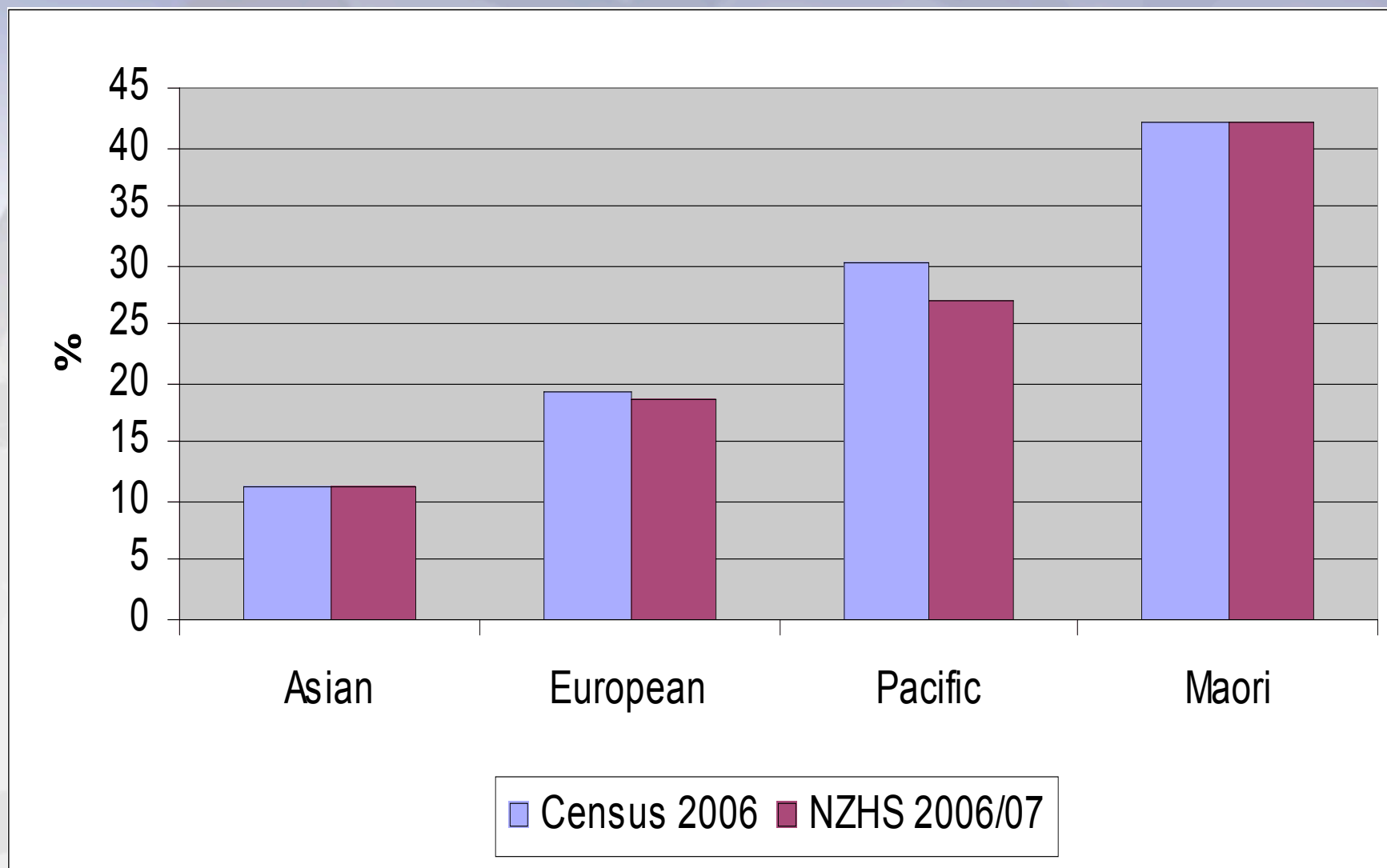


Prevalence of adult smoking by ethnicity, 1990–2007



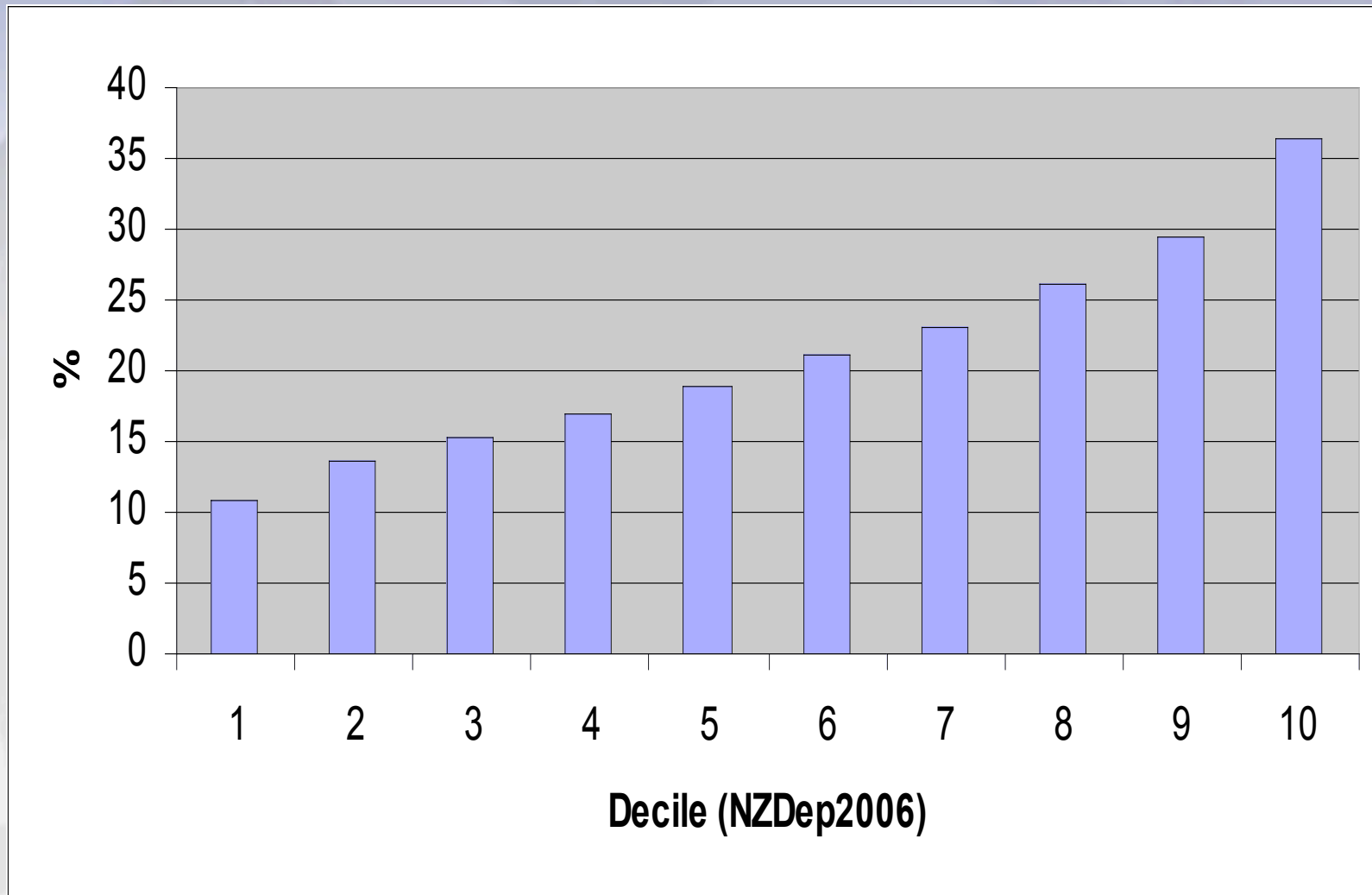
Source: "Tobacco Trends 2007" Ministry of Health

Adult smoking by ethnic group

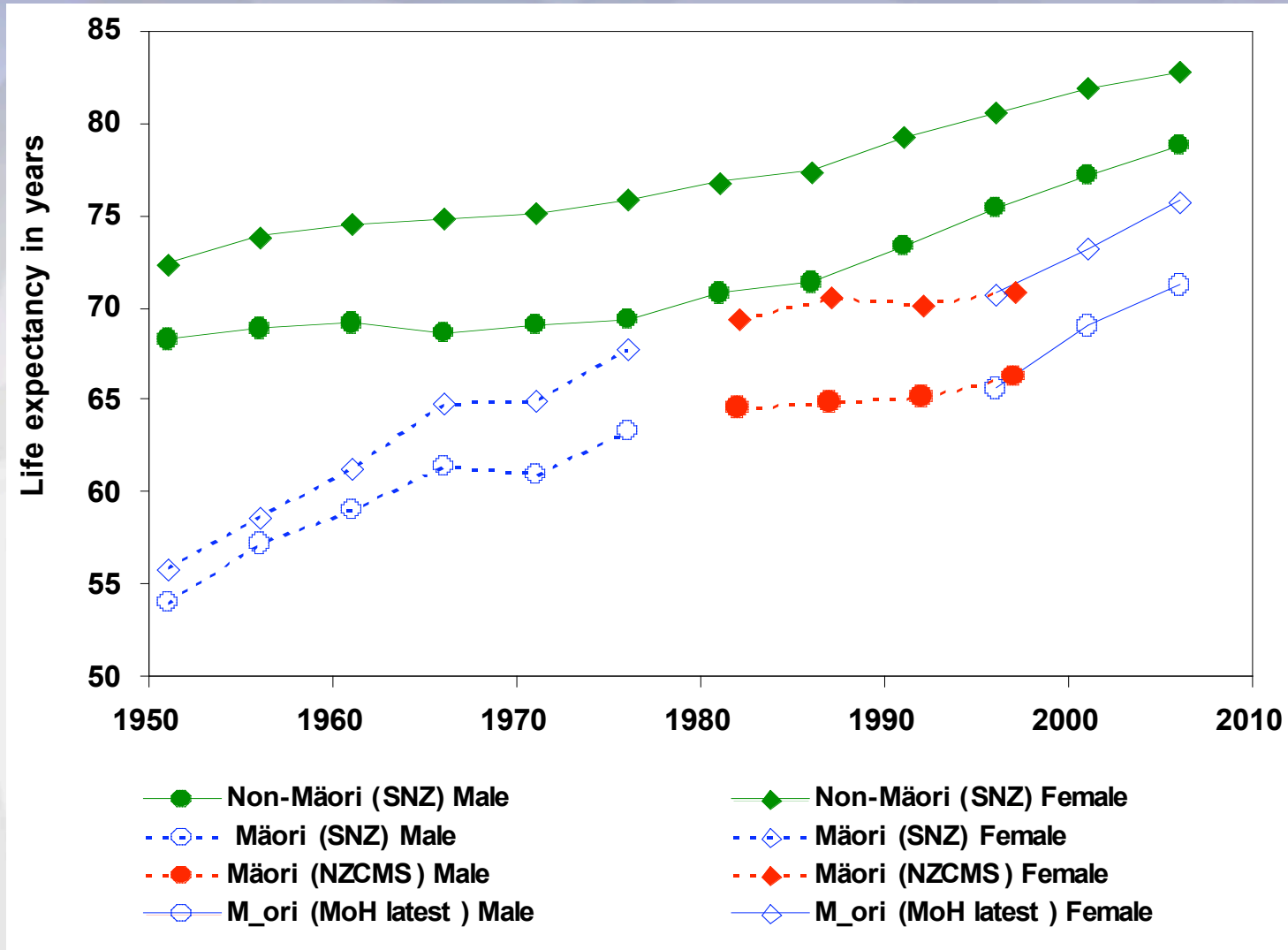


Adult smoking by deprivation

(small area measure – Census 2006 data, Ponniah et al *NZ Med J*)

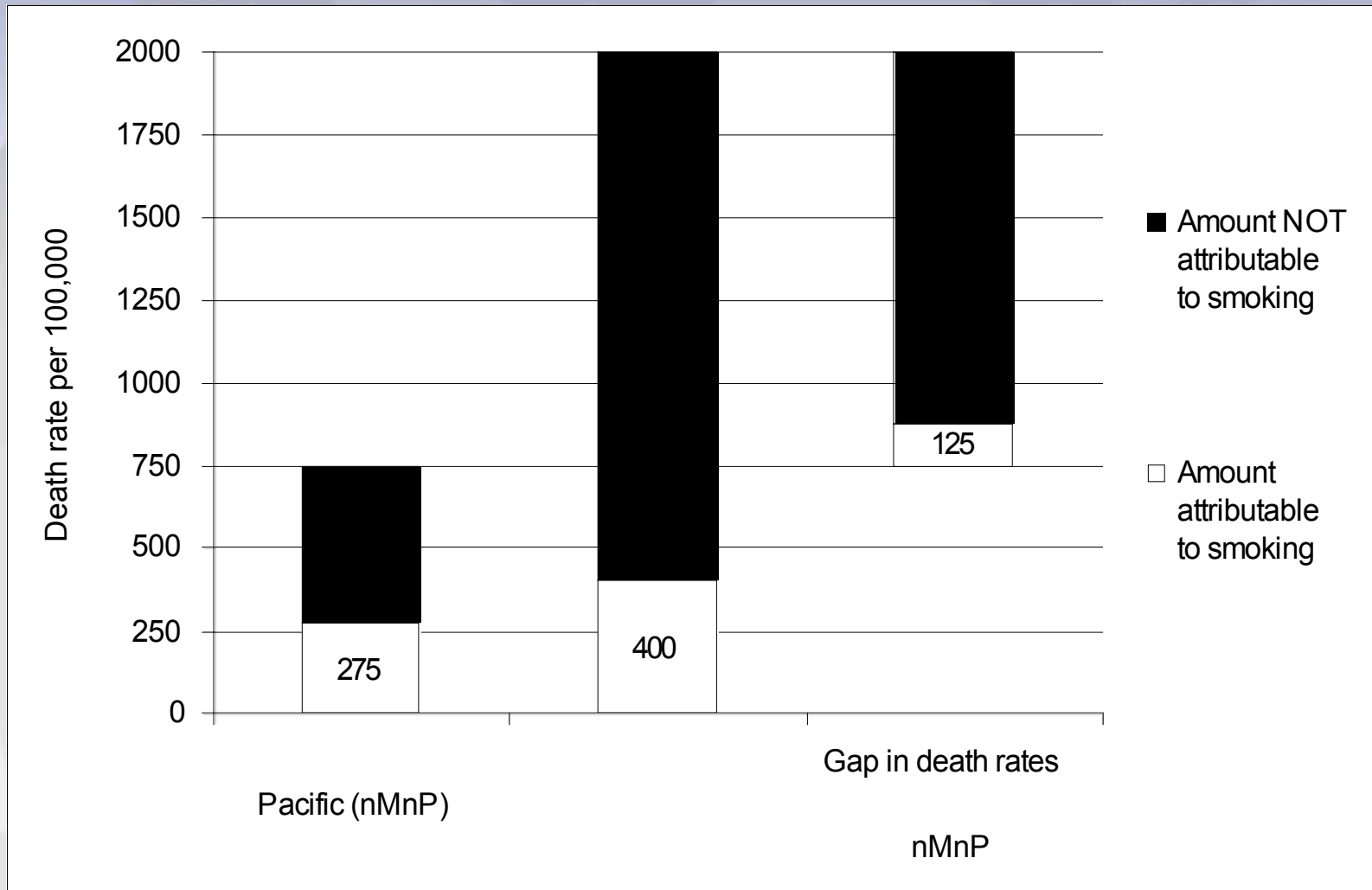


Health inequalities in NZ



Source: Blakely T, et al. *Soc Sci Med* 2005;2233-2251. *N Z Med J* 2008;121:7-11.

Summary of the contribution of tobacco to mortality within Maori and European/Other aged 45-74 years (sexes combined) in the late 1990s



Source: Blakely T (unpublished); Wilson et al *Int J Equity Health* 2006;2:14.

Maori resistance to tobacco



Maori Murder

Have you heard how the tobacco industry kills Maori ?

R.I.P.


Here are the facts:

- Tobacco is the single biggest killer of Maori.
- It accounts for a third of all Maori deaths.
- This means higher rates of lung cancer, heart disease, cot death.
- Respiratory infections, plus ear, meningococcal disease and diabetes.
- Almost one in two Maori smokes. That's way higher than any other group in the country.

It's legal genocide.

Te Reo Marama
www.te-reo-marama.org.nz

Photo: coroners' records, 2014-2016



ITC Project (NZ) – Agencies & funding

Key agencies involved

University of Otago
University of Auckland
Ministry of Health

Funding

Health Research Council of
New Zealand

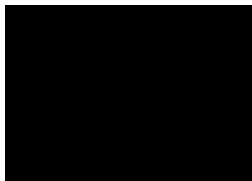


In-Country Investigators

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And 8 other team members (see our website: <http://www.wnmeds.ac.nz/itcproject.html>)

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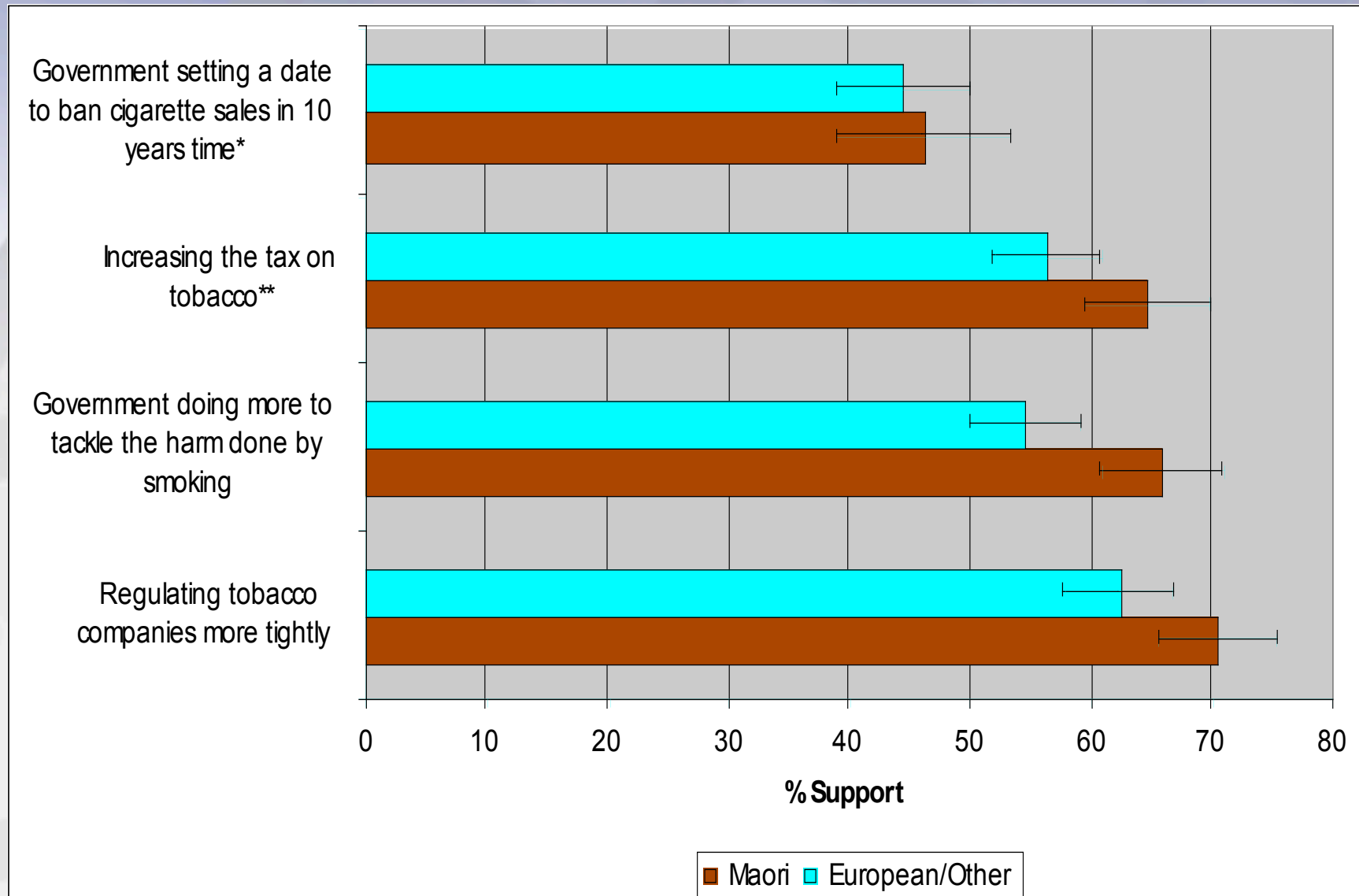
ITC Project (NZ) - Methods

NZ Health Survey 2006/07: Representative survey with boosted sampling of Maori, Pacific peoples & Asian NZers (n=17,000 children/adults)

Wave 1 March 2007 / Feb 2008: Standard ITC survey (CATI) with some additional questions (n=1376 smokers) (44% Maori, 7% Pacific, 4% Asian)

Wave 2 March 2008 / Feb 2009: n=923 (33% attrition).

Maori smoker views on tobacco control policies



See: Edwards et al NZ Med J 2009

Majority Maori smoker support for:

New product laws: Reducing the toxins in cigarette smoke (85%), reducing the addictiveness of cigarettes (84%), for factory-made cigarettes to be fire-safe (76%).

Marketing and supply controls: Banning all promotion of cigarettes by tobacco companies (85%), complete bans on displays of cigarettes inside shops and stores (63%), and limiting tobacco sales to special places where children are not allowed to go (67%).

New smokefree areas: Only a minority agreed that smoking *should be allowed* in playgrounds (29%), within 5m of the entrance to public buildings (45%), and in cars with children inside (3%).

But only minority Maori smoker support for:

- Tobacco companies being required to sell cigarettes in plain packages (42% support)
- Some new types of smokefree areas: Lifeguard patrolled beaches (49%), some of the outdoor seating areas of pubs/bars (20%)

Pacific peoples in NZ



The Quit Group
TE Kōwhiri Mā Mutu

INFOSHEET

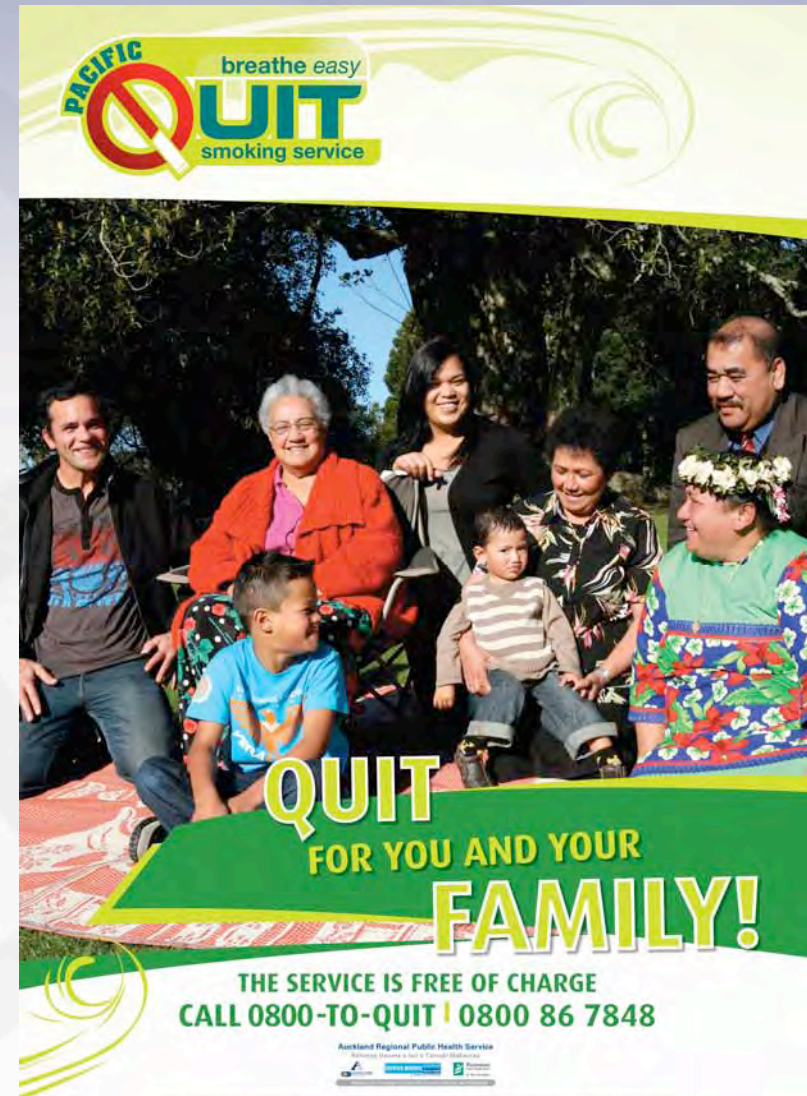
SAMOAN

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Dialfree: 0800 776 776
Published by Māori Health
Date: 2010/11
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The Quit Group
TE Kōwhiri Mā Mutu

Whānau me
tāpapa me
te fa'amutaina o
te ala o tōu
Cutting ready to Quit

Quit Mā Mutu



PACIFIC breathe easy
QUIT
smoking service

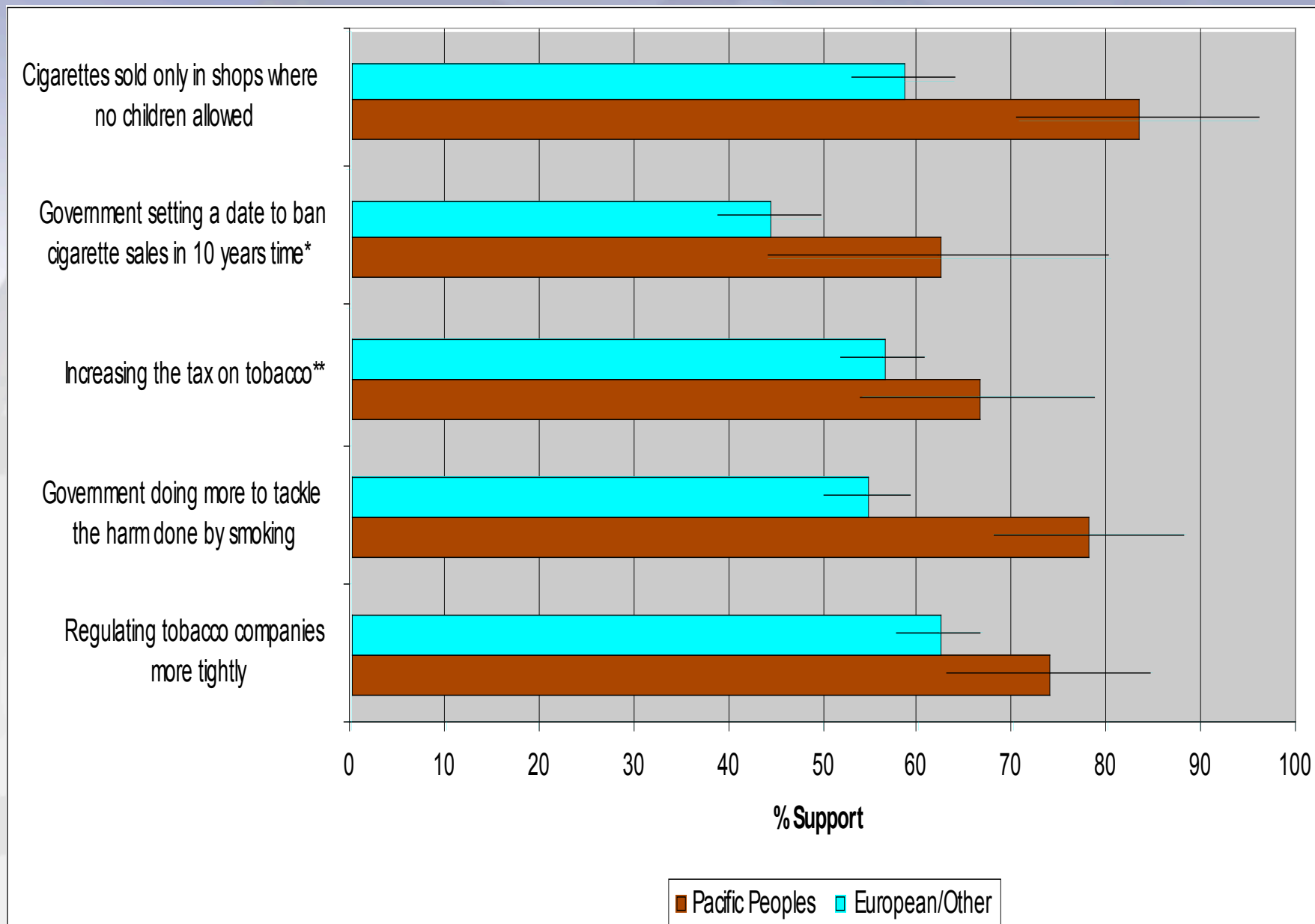
QUIT
FOR YOU AND YOUR
FAMILY!

THE SERVICE IS FREE OF CHARGE
CALL 0800-TO-QUIT | 0800 86 7848

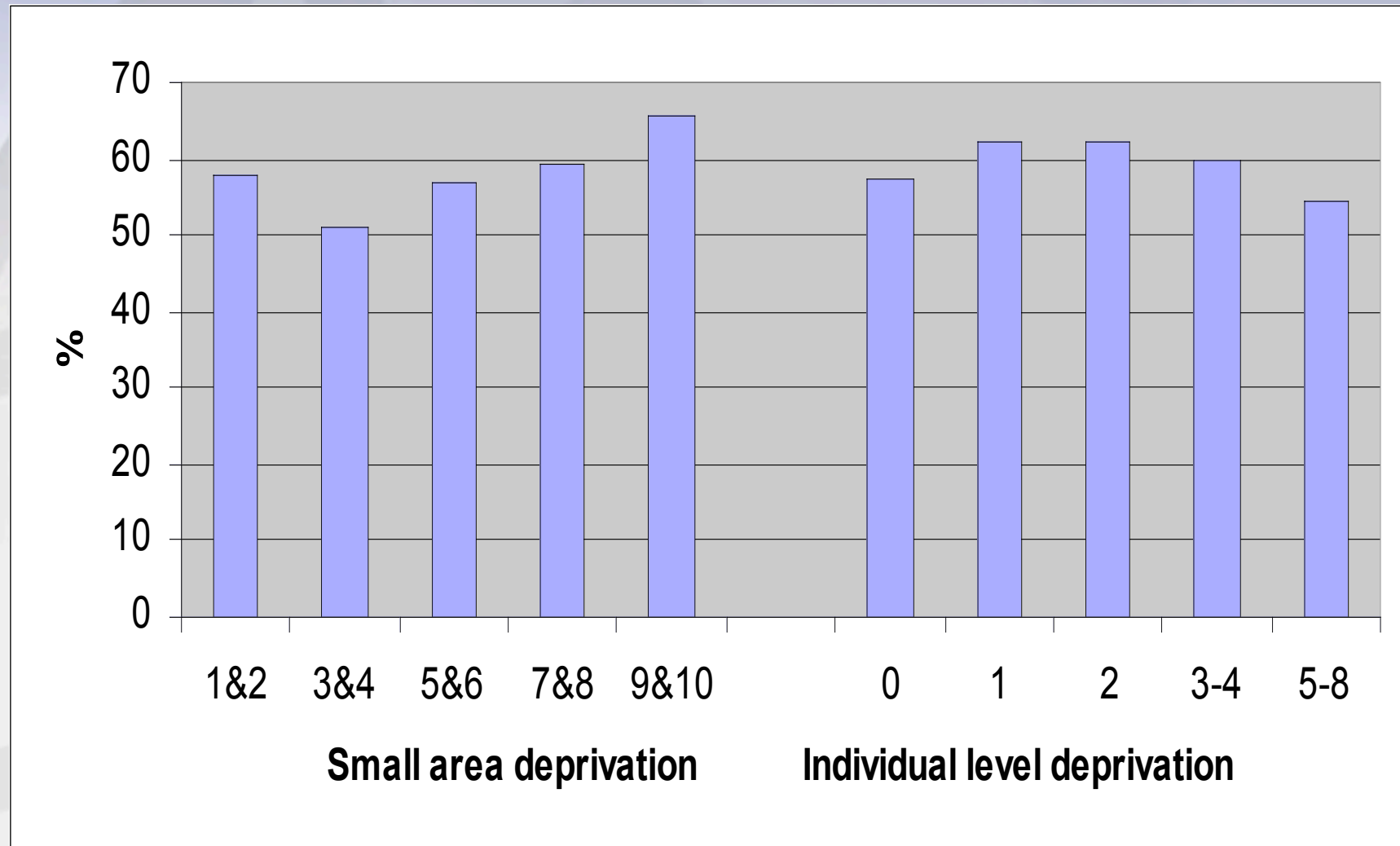
Auckland Regional Public Health Service
Whangarei District Health Board
Waikato District Health Board
Bay of Plenty District Health Board
Hawke's Bay District Health Board
Manatū Hauora
Ministry of Health

Service provided by the Auckland Regional Public Health Service for Auckland and Waitemata District Health Boards

Pacific smoker views on tobacco control policies



Support for higher tobacco tax (if dedicated)

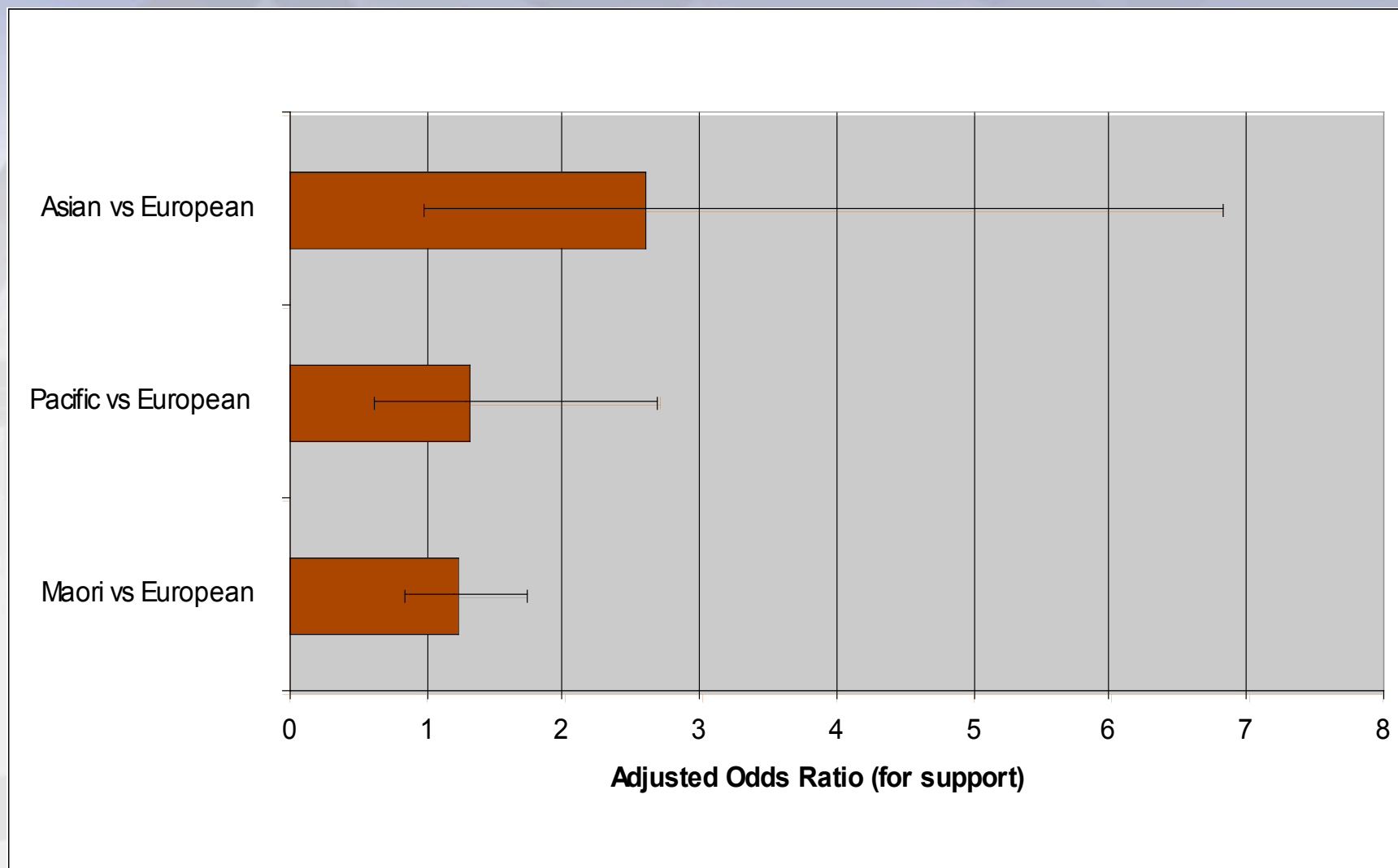


Support for higher tobacco tax

- Most smokers: current level of tax is “too high” (68%), **but** a majority (59%) would support an *increase* in tax if the extra revenue used “to promote healthy lifestyles and support quitting”.
- In the fully-adjusted multivariate model (support for increased & dedicated tax):
 - Increased with higher small area deprivation level (aOR=1.15, 95%CI=1.01 – 1.32)
 - Suffering one form of financial stress: aOR=1.81 (1.18 – 2.78)
 - Concern about the smoking impacts on health and quality of life (aOR=1.41)
 - Strength of intention to quit (aOR=1.30)

See: Wilson et al *Nicotine Tob Res* 2010

Support for new smokefree areas



Support for new smokefree areas (smokers)

Multivariate analyses – “strong support” associated with:

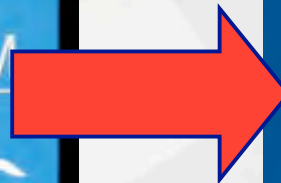
- Greater knowledge of the SHS hazard:
aOR = 1.54, 95%CI=1.14 – 2.08
- SHS protection scale: aOR = 1.40 (1.09 – 1.78)
- Having smokefree cars: aOR = 1.68 (1.21 – 2.34)
- Not by ethnicity or SES – except for having a form of financial stress: aOR=1.64 (1.11 – 2.43)

Smokers' Responses to GHWs by Ethnicity and Deprivation

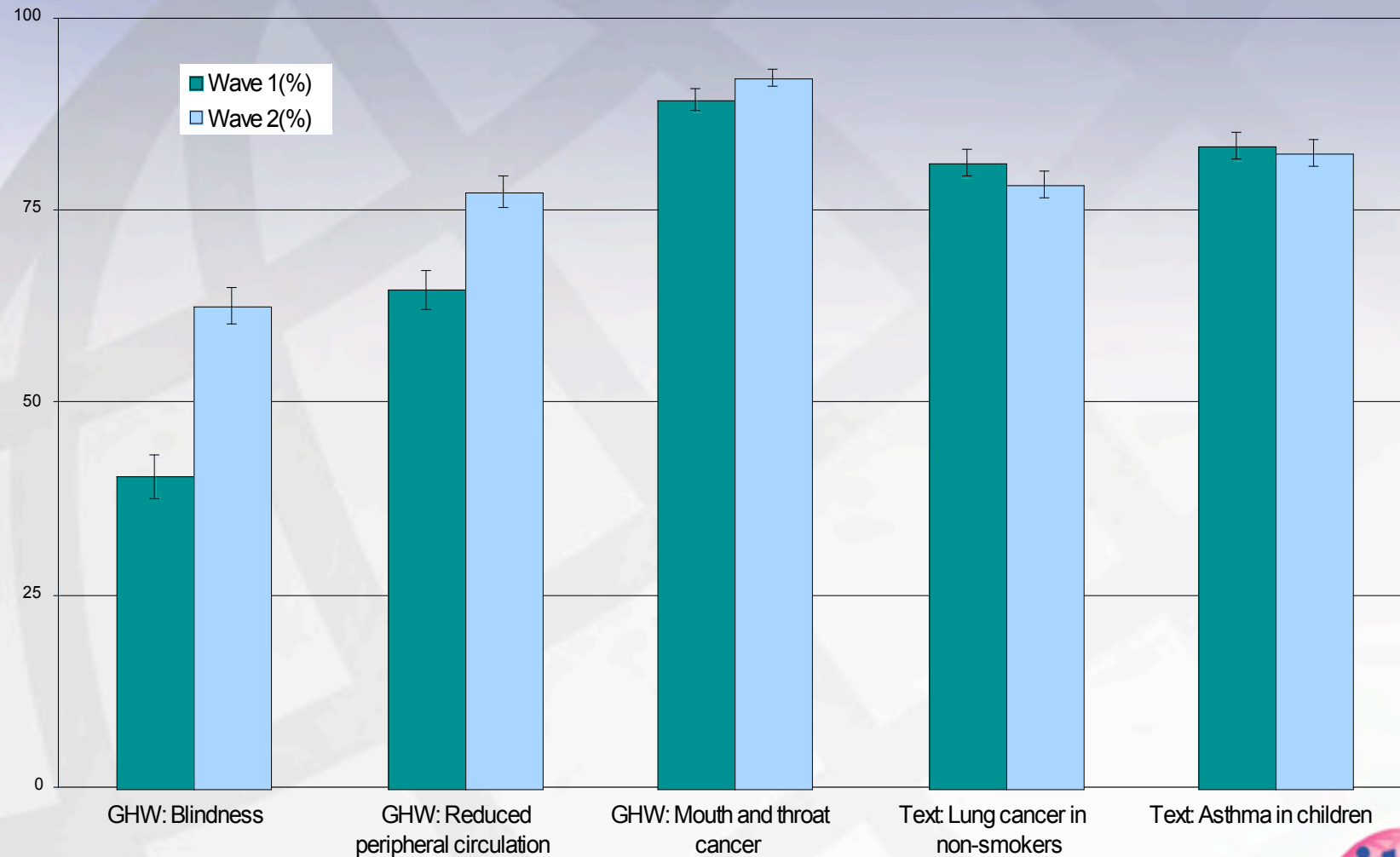
From text warnings (Wave 1) to GHWs in Wave 2

Front – 30%

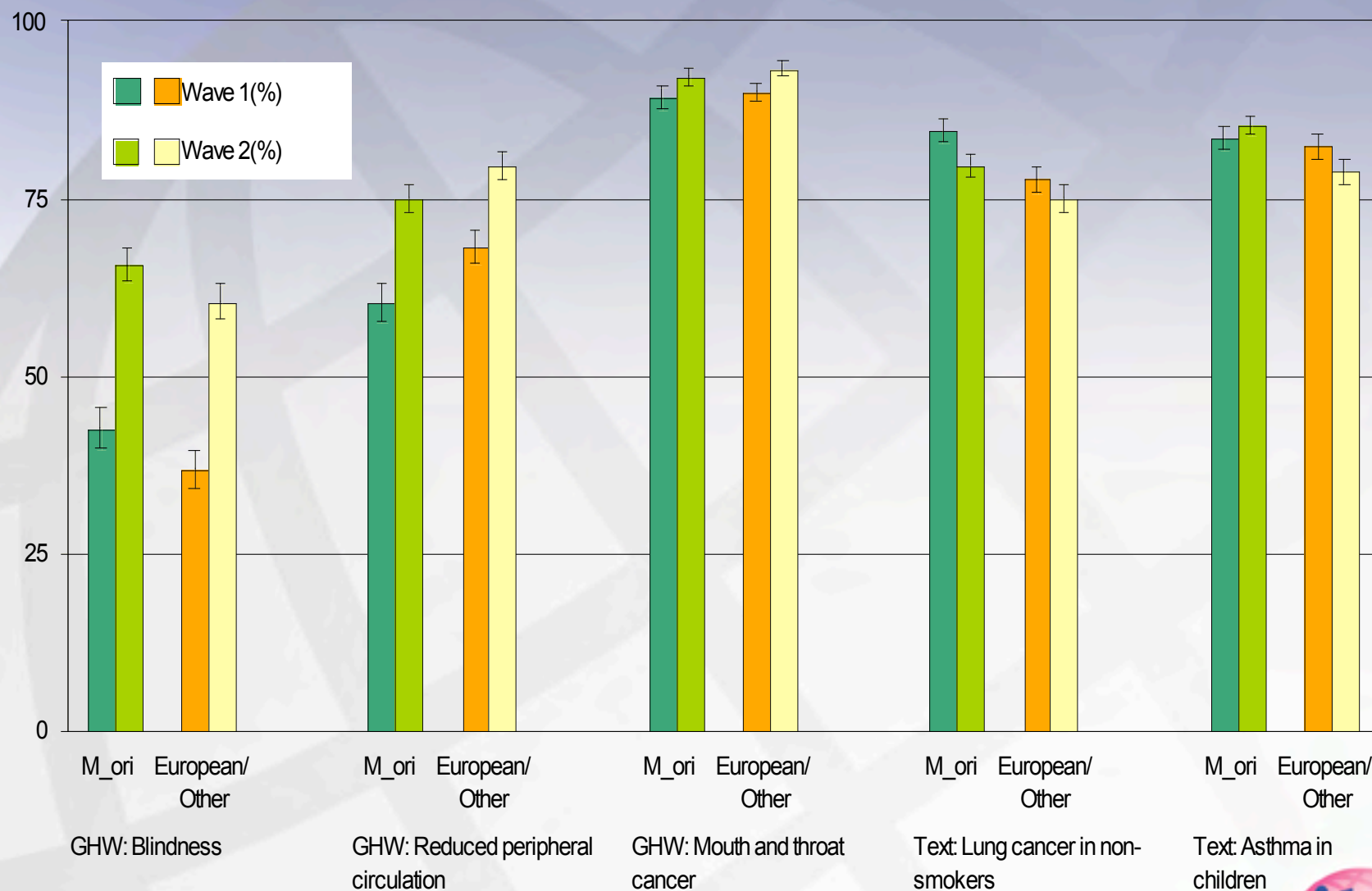
Back – 90%



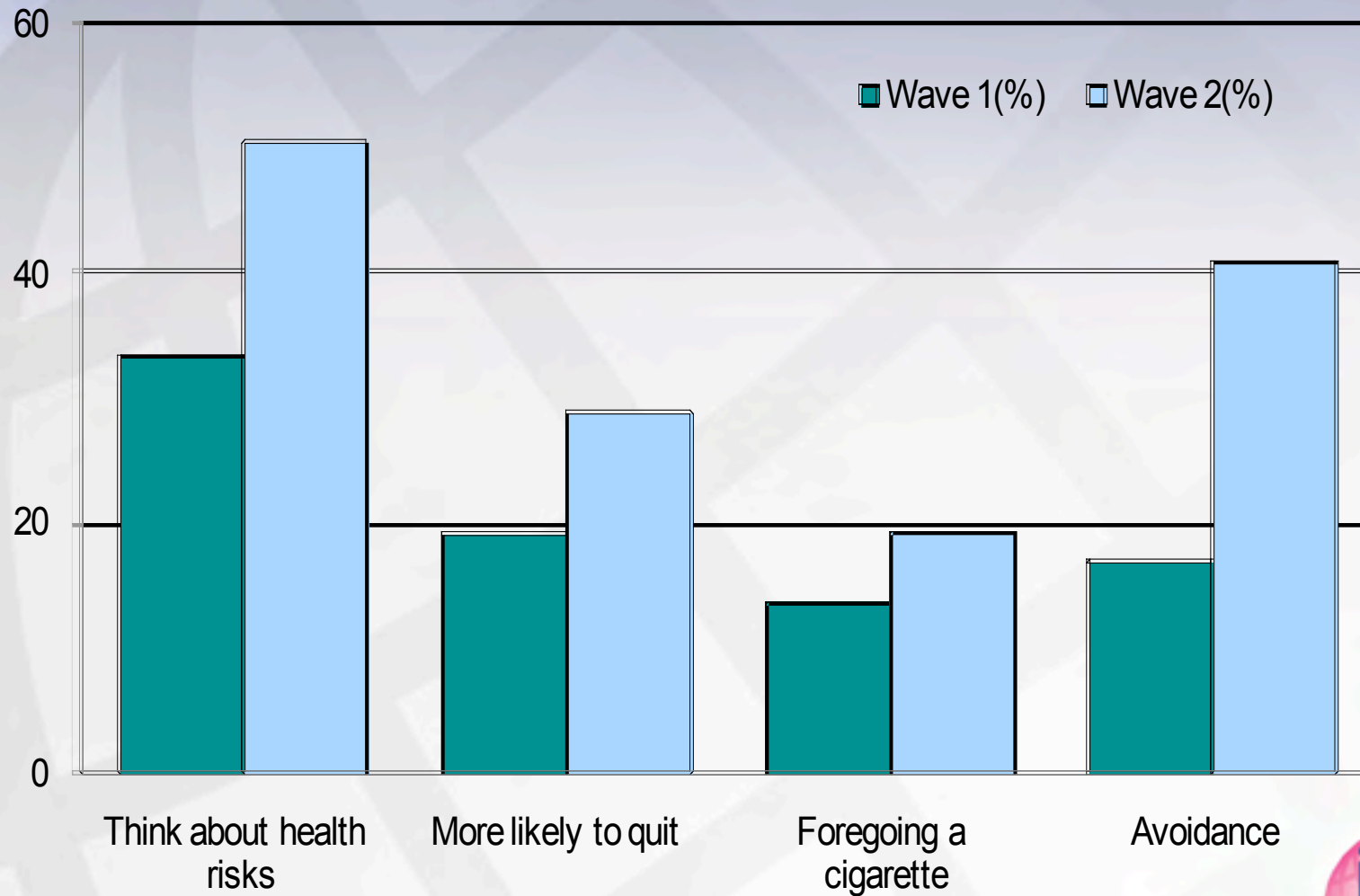
Knowledge of smoking-related disease in wave 1 (text warnings only) & wave 2 (after the new GHWs were introduced)



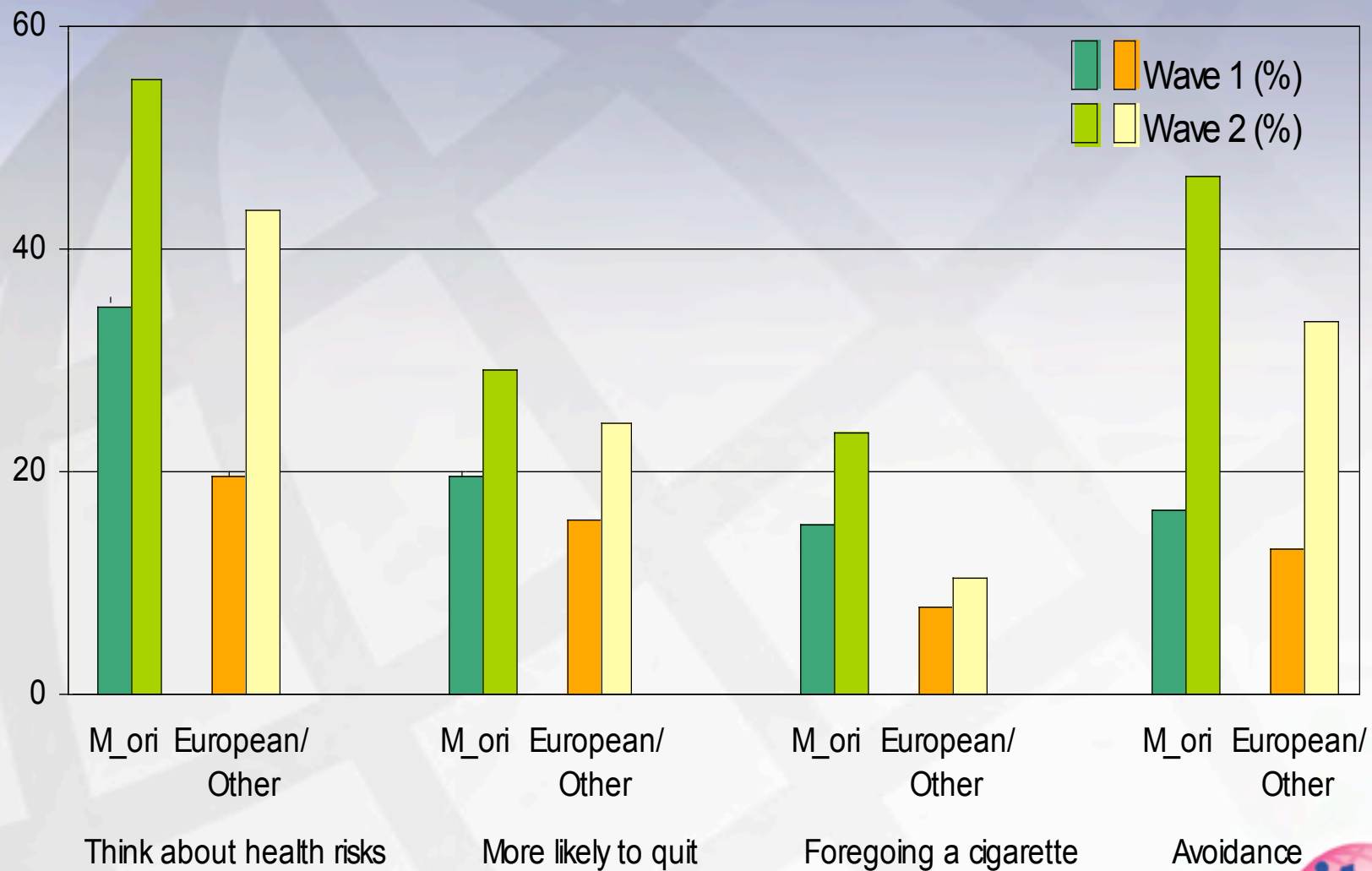
Knowledge, new GHWs & ethnicity



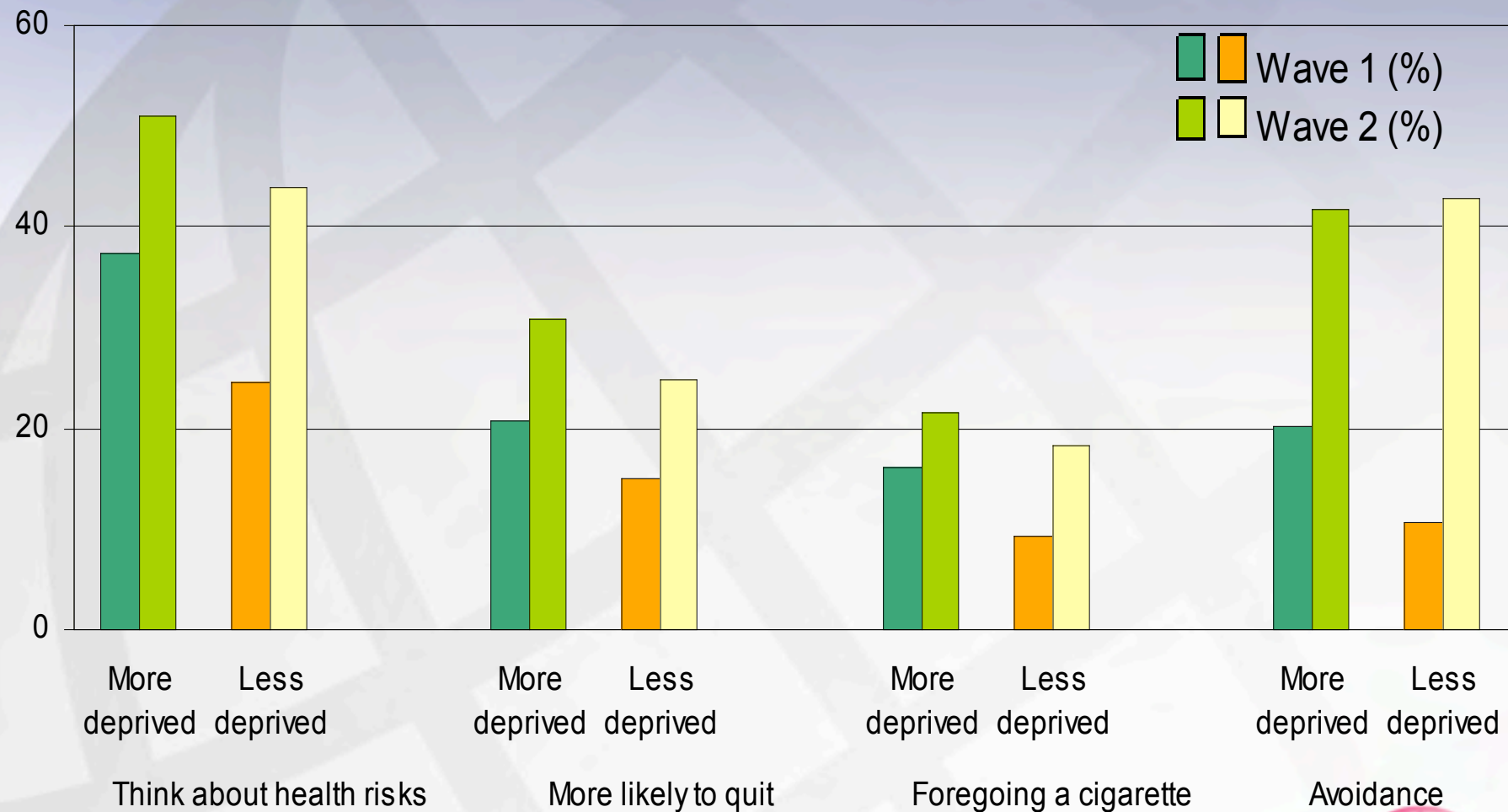
Reactions towards warning labels in wave 1 (text warnings only) and wave 2 (after the new GHWs were introduced)



Reactions by ethnic group



Reactions by deprivation (small area measure)



Discussion – GHWs

- These GHWs increased knowledge and stimulated stronger reactions than text warnings
- These GHWs have stronger effects on indigenous and more deprived populations: so may contribute to reducing smoking-related health inequalities
- The effects of GHWs may be under-estimated here since some respondents may still have been buying packs with text warnings (at W2 interview in early 2008)

Possible responses

- Further research on priority audiences:
 - NZ example: identify components that produce the strongest effects for Maori. The graphics? The indigenous language?

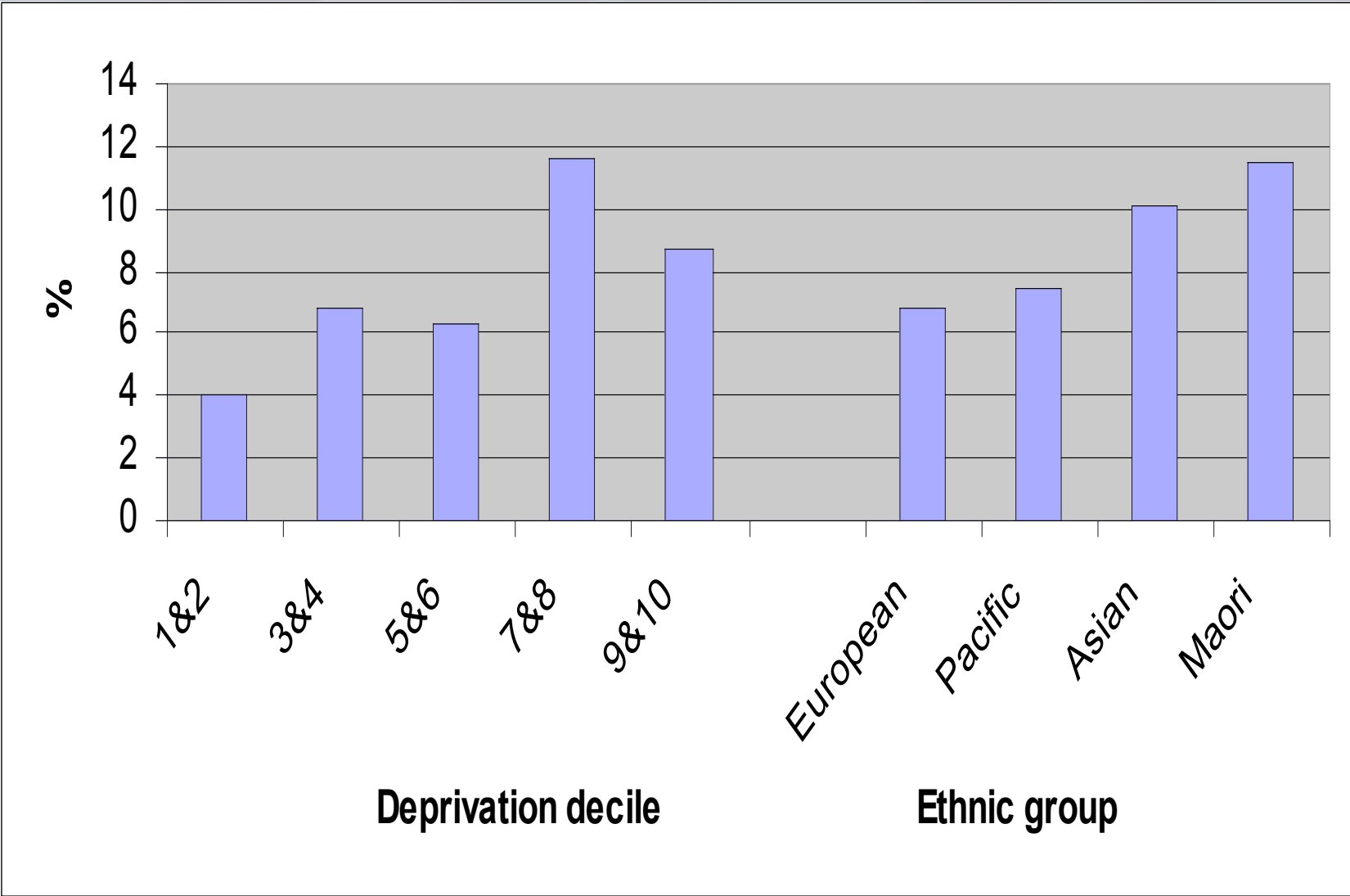
To optimize the impact of GHWs:

- Increase size and range of GHWs?
- Increase “fear arousal” themes?
- Reduce visual clutter?

Back-of-pack



Quitting Behavior – Use of the Quitline (last 12 months)



Calling the quitline

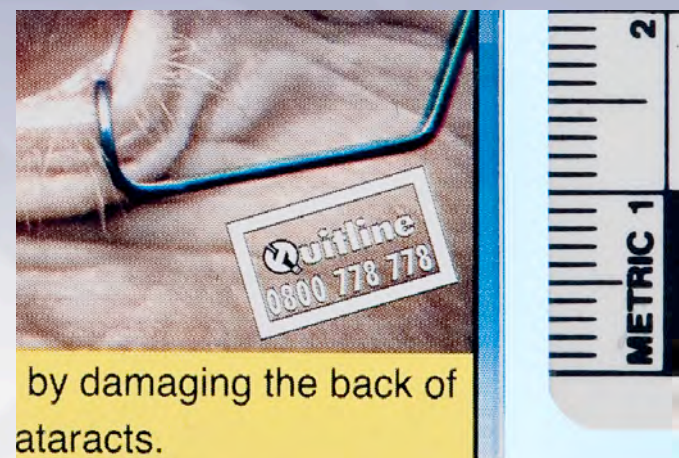
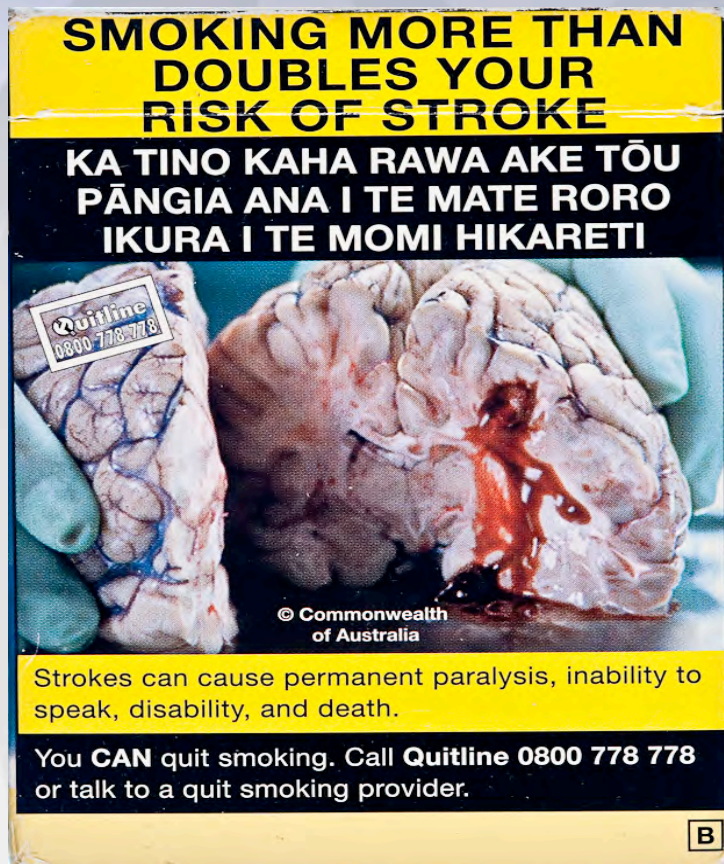
In the multivariate analyses, significantly higher quitline calling by:

- Maori
- Those reporting financial stress (but not other deprivation measures)
- Those reporting a past mental health disorder

Conclusion: Results suggest that the Quitline service is successfully stimulating disproportionately more calls by Maori smokers and those with some measures of disadvantage (pro-equity intervention).

“Quitline” wording added to packs

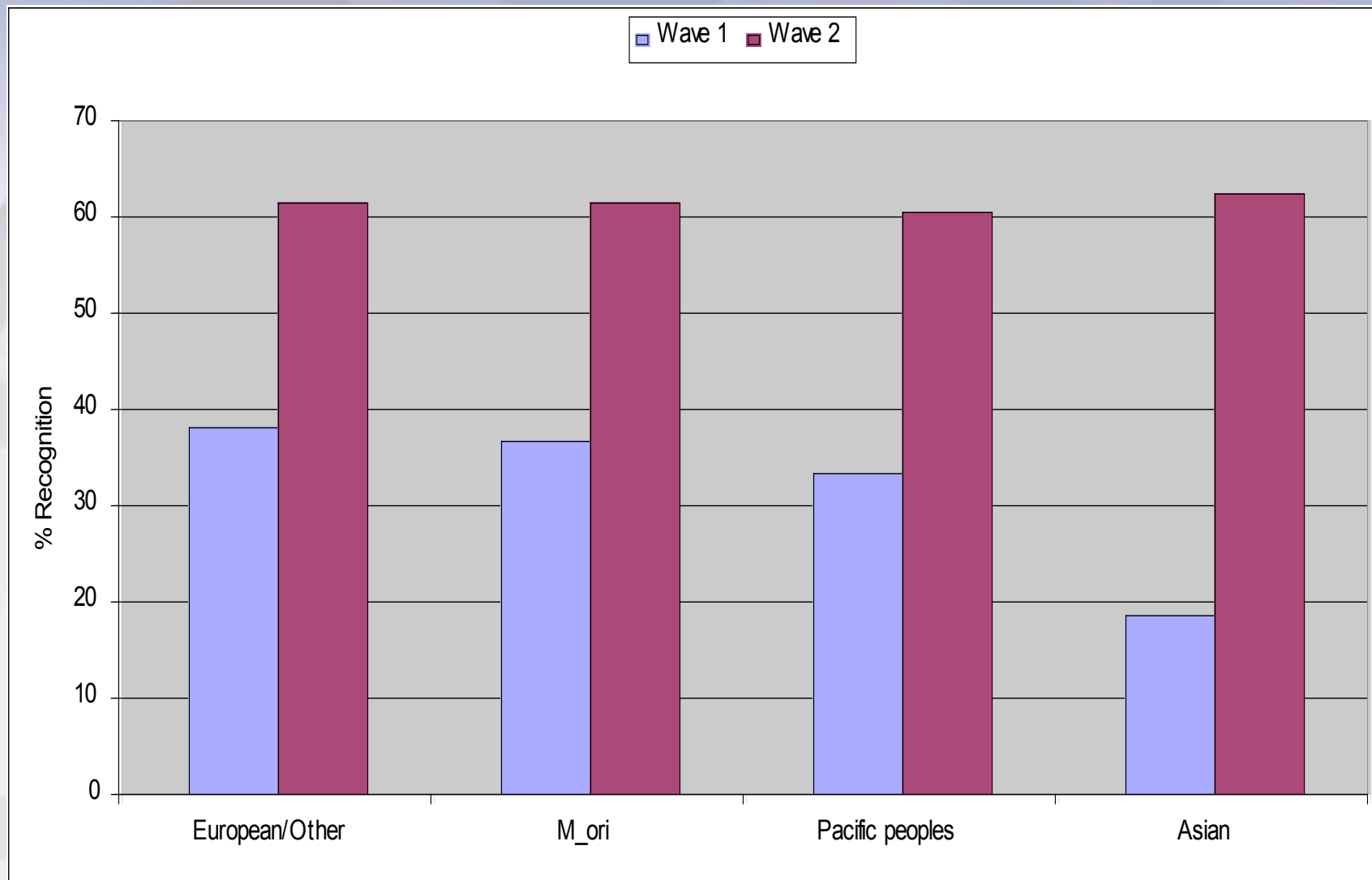
NZ example



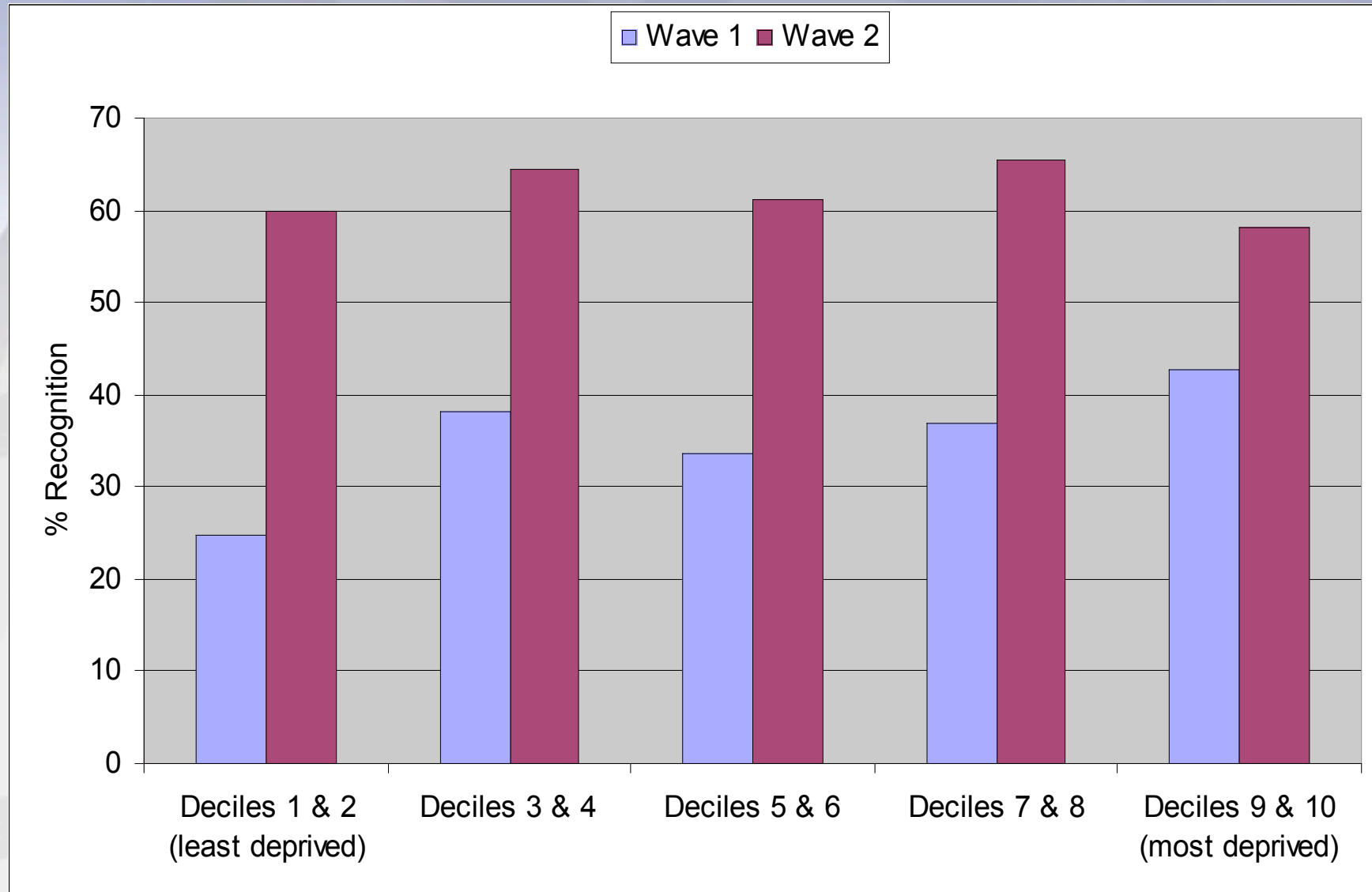
Australian example



Recognition of the Quitline number on packs by ethnic group



Recognition of the Quitline number on packs by deprivation level



Quitline number on packs

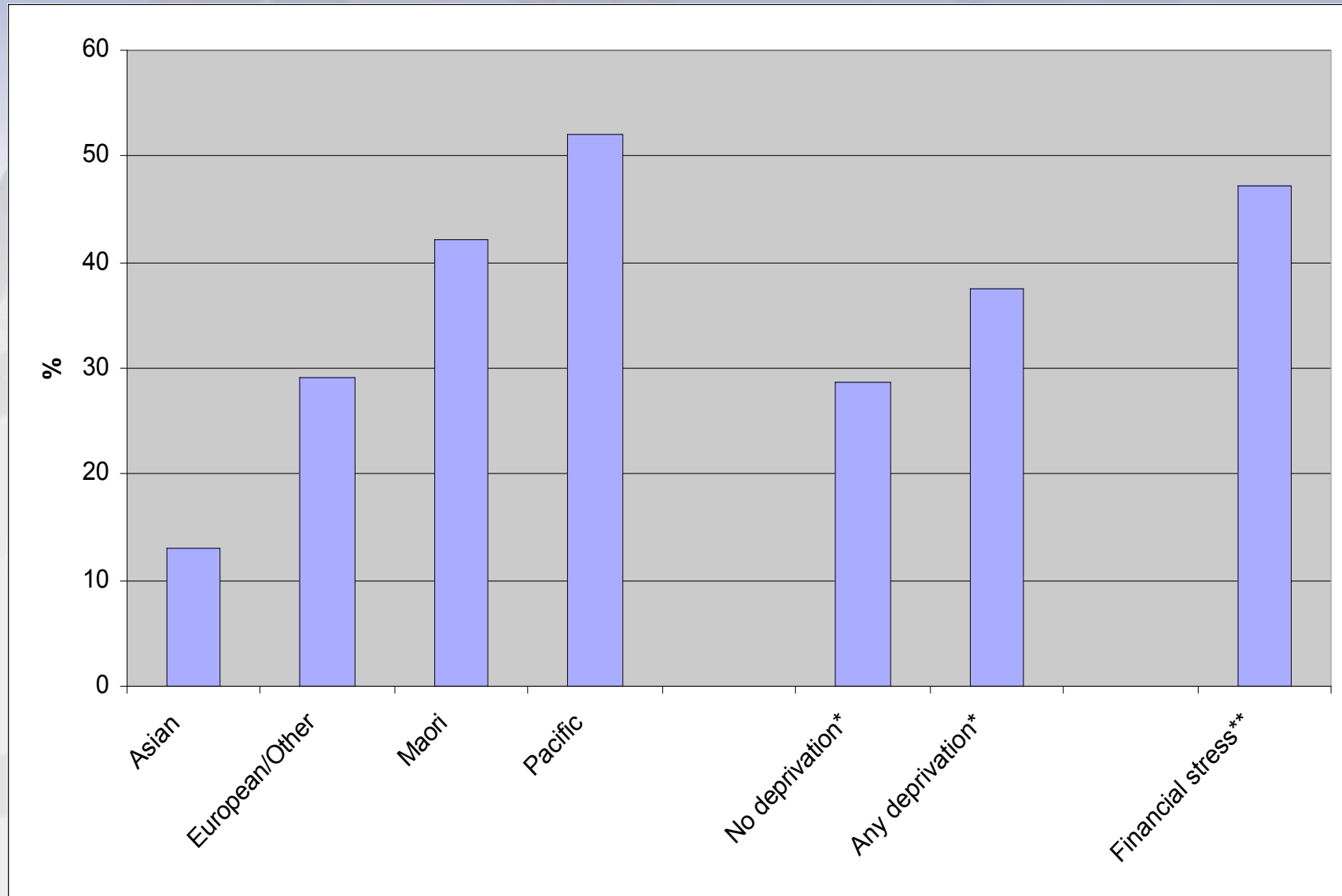
Overall - a 24% between-wave increase in recognition of the Quitline number on packs (from 37% to 61%, $p < 0.001$)

Recognition increased from a minority to a majority for all: age groups, genders, deprivation levels, financial stress, and ethnic groups.

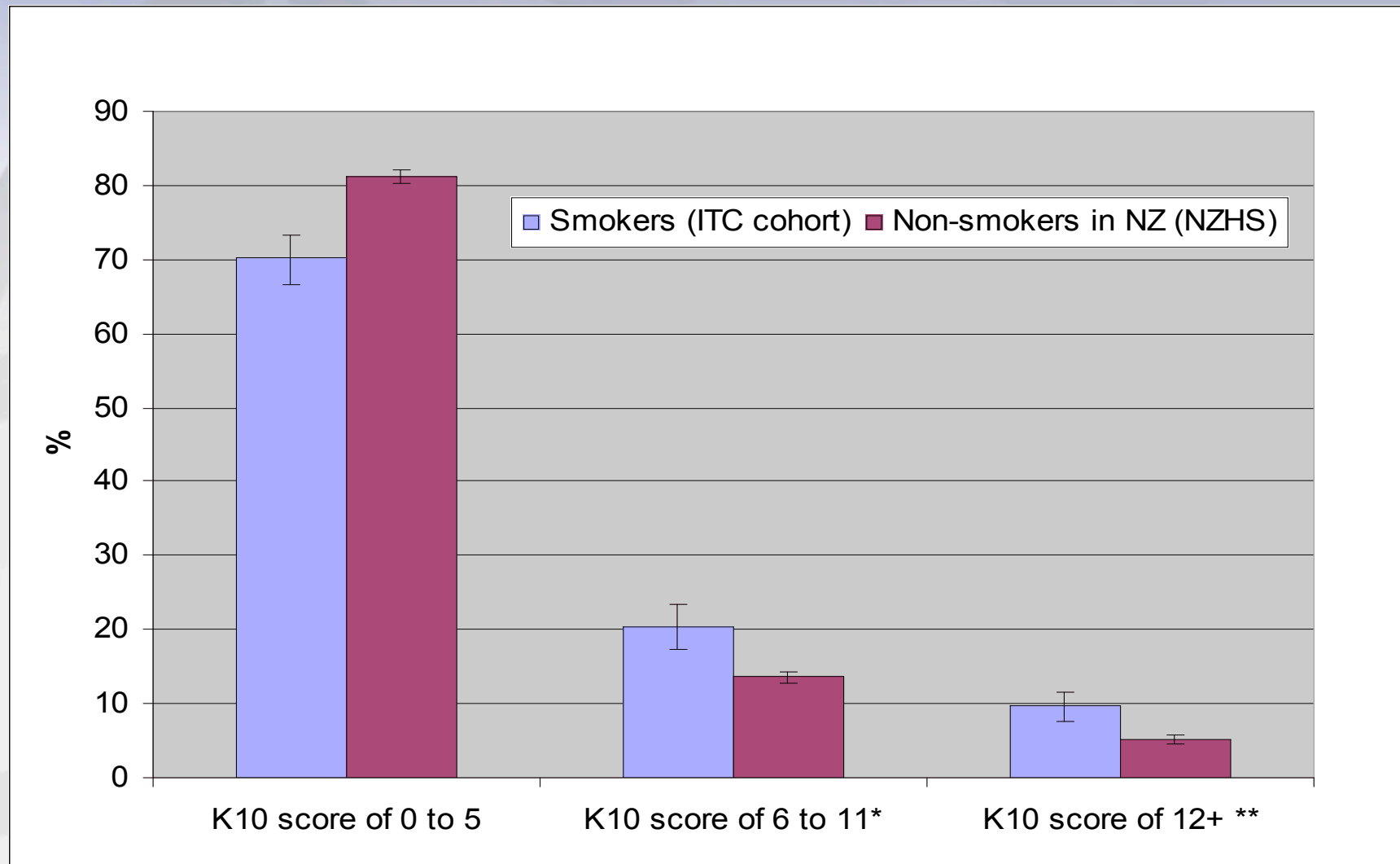
Results consistent with quitline usage data

Conclusion: Evidence of benefit for all socio-demographic groups – further support for the value of information on packs (even when pack design is sub-optimal).

Selected results: Hazardous alcohol use in smokers (AUDIT score ≥ 8)



Selected results: Poorer mental health of smokers (psychological stress Kessler 10)



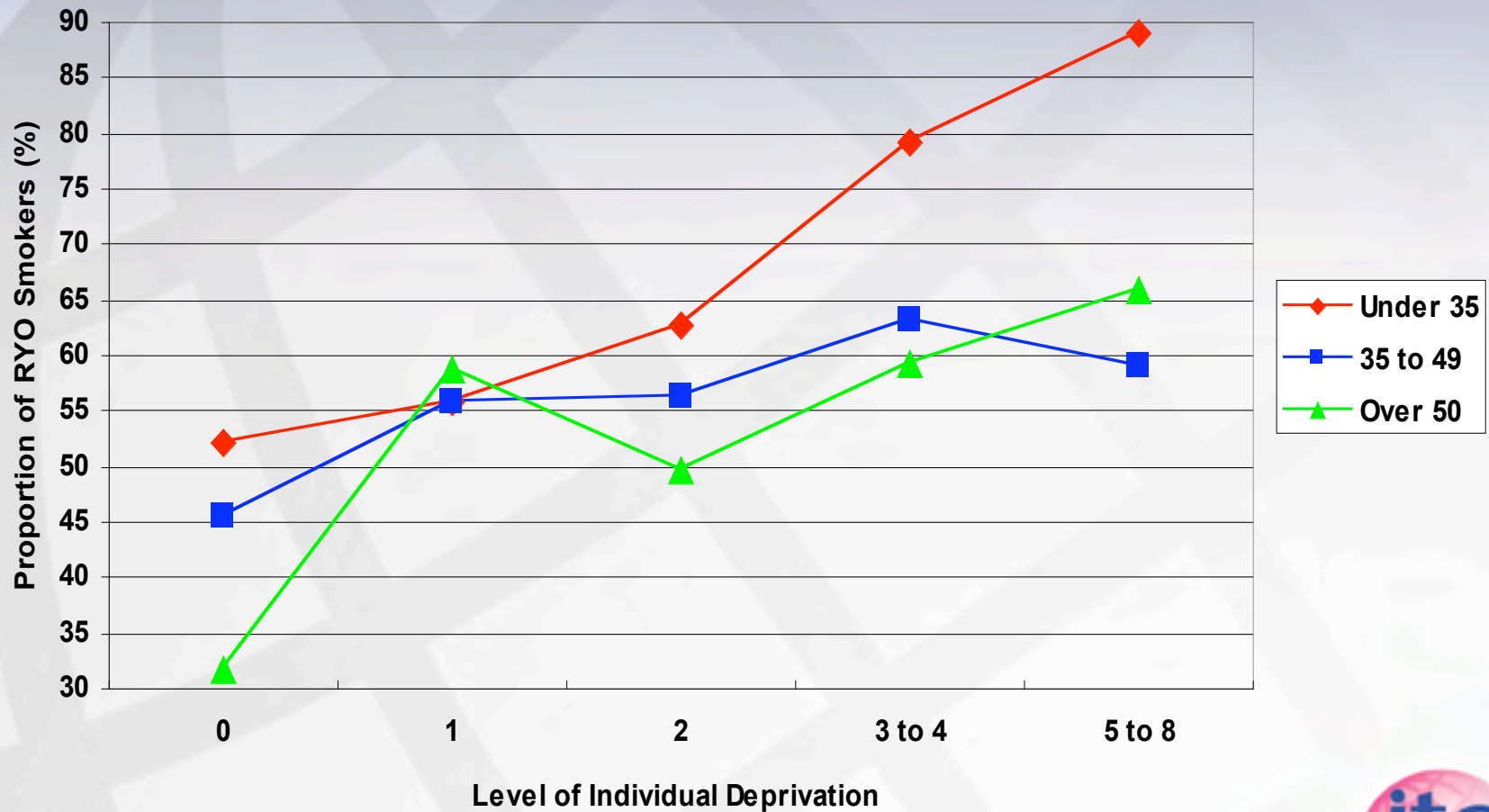
RYO usage

High prevalence of regularly smoking RYOs: 53% (38% exclusive RYO).

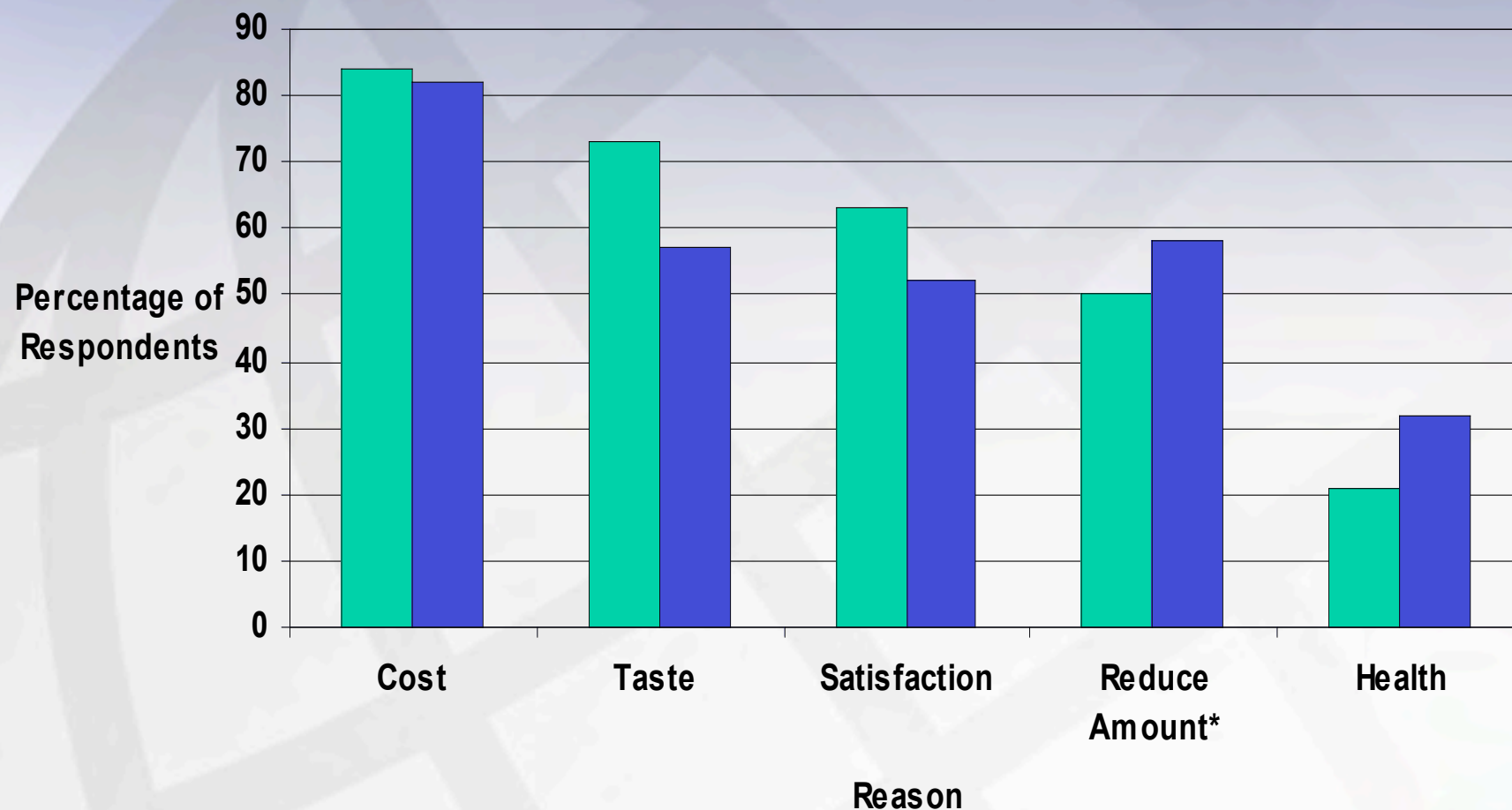
In the fully-adjusted model in the multivariate analysis:

- Higher use by any individual deprivation:
aOR = 4.74 (2.14 – 10.52)
- Number of friends who are smokers:
aOR = 1.14 (1.03 – 1.27)
- Heaviness of smoking: aOR = 1.18 (1.08 – 1.29)

Selected results: Proportion of smokers using any RYO, by level of individual deprivation and age

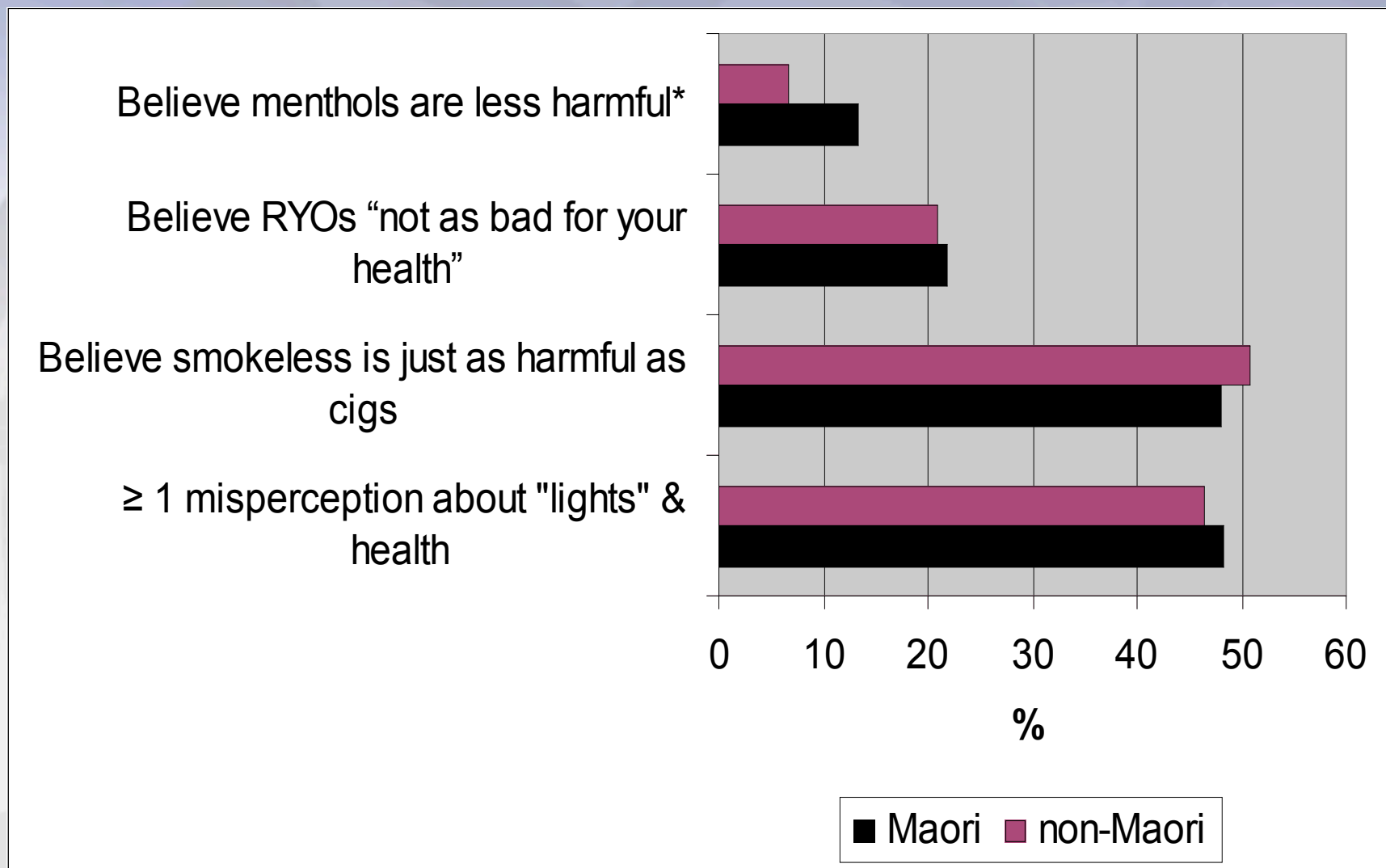


Reasons for smoking any RYO in NZ (Wave 1, 2007) & Australia (Wave 5, 2006/07)



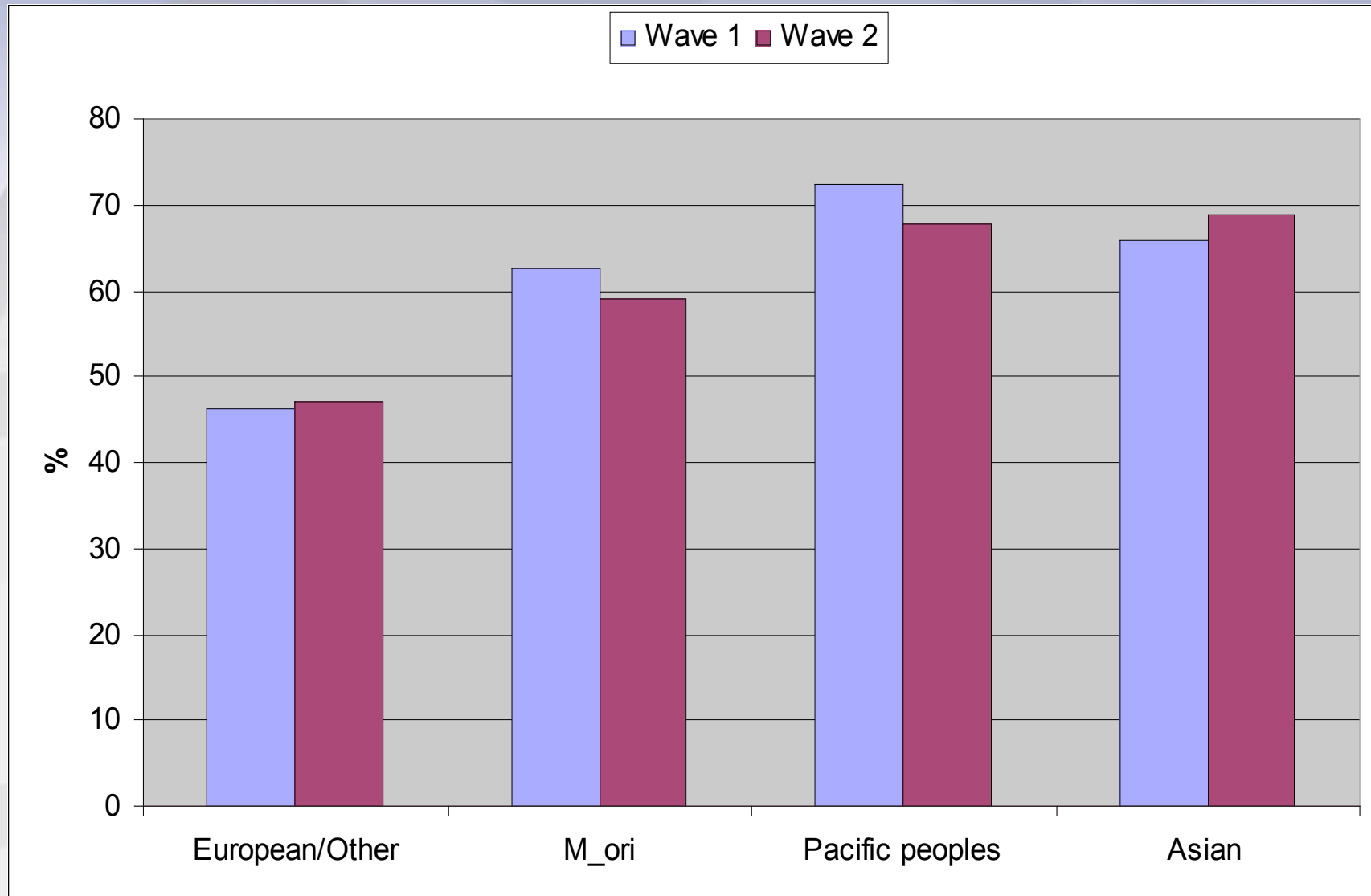
■ New Zealand ■ Australia

Selected results: Smoker misperceptions & ethnicity

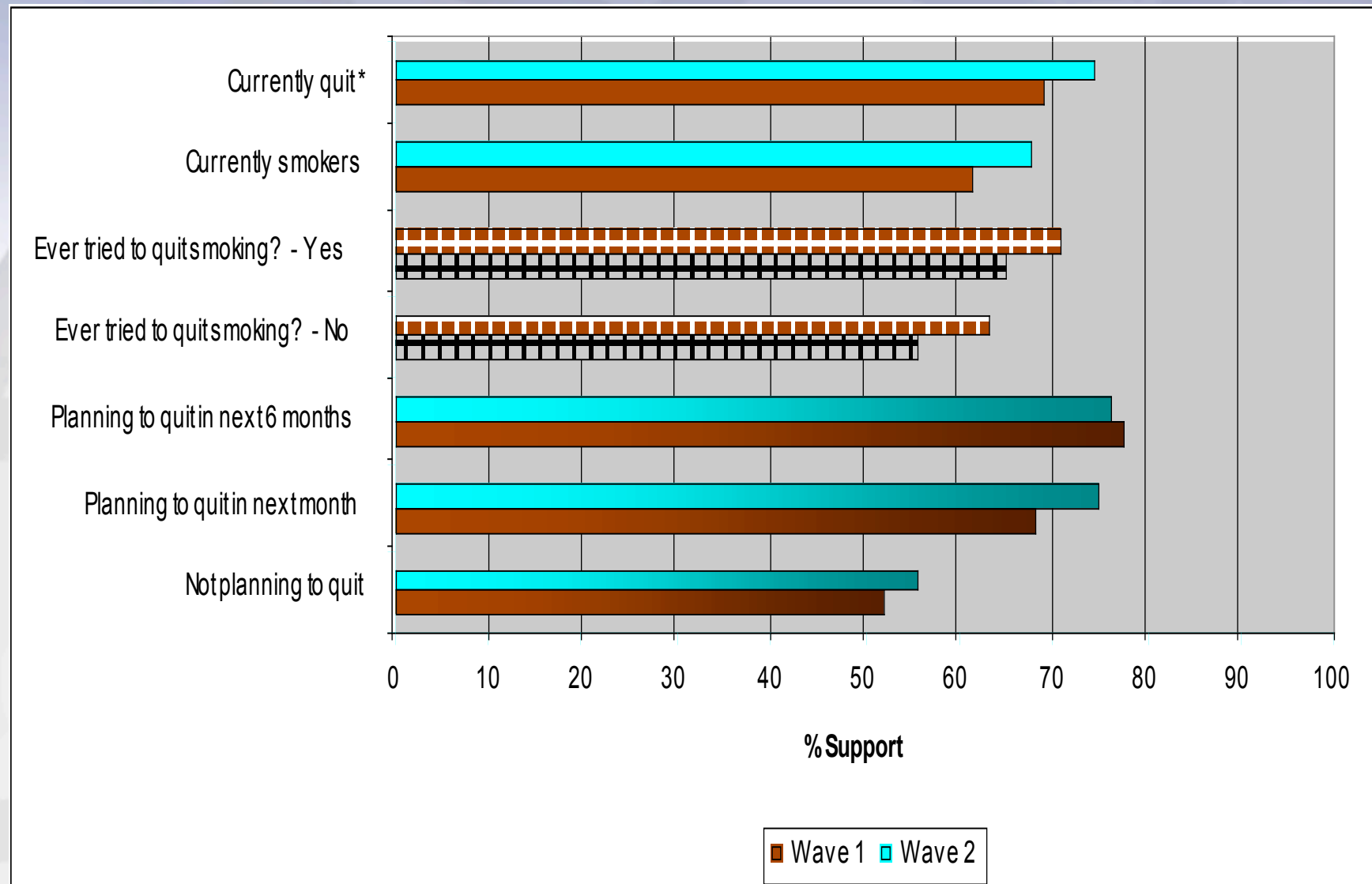


See: Wilson et al BMC Public Health 2009; Nicotine Tob Res 2009; NZ Med J 2009

Belief that nicotine in cigarettes is the chemical that causes most of the cancer



Smoker support for point-of-sale display ban (proposed by advocates)



ITC Project – Allied studies

- Air quality studies (PM_{2.5}), especially restaurants/pubs (smokefree law in 2004 – high compliance)
- Cigarette butt collection (shorter butts with greater area deprivation)
- Collection of discarded cigarette packs (GHW distribution, descriptors, foreign packs)
- Observational study of cigarette packs on café tables; Shopkeeper interviews re GHWs (PhD student)
- Cigarette collection for repository (Roswell Park)

Sector responses to ITC Project (NZ) data

- Favorable response – academic / health advocates / Maori advocates
- Work on “lights” & misperceptions – supplied to a Commerce Commission Inquiry on “lights”
- Informed active debates: tax increase & point-of-sale ban – evolving
- Informed a 2010 NZ Government Inquiry (which may advance tobacco control)

Summary

- ITC Project (NZ) appears to have been helpful for informing tobacco control in NZ, some contribution to international literature.
- This work has facilitated understanding of ethnic and socio-economic aspects of smoking and responses to tobacco control (especially for Maori).
- Linking with the NZ Health Survey data has added value.
- Still scope for many additional analyses.

Thanks again to our international ITC Project colleagues

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