## Smoking in pregnancy among Indigenous women in high income countries

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#### Overview

- Indigenous women from high-income countries of USA, Canada, Australia and New Zealand
- Historical basis for smoking in countries colonized by Western nation states
- Indigenous women disadvantaged in multiple ways
- Contexts vary, but factors in common:
  - Dispossession
  - Inequitable access to education and healthcare
  - Disproportionate exposure to environmental health risks
  - Discrimination
  - Higher unemployment
  - Over-representation among lower socioeconomic levels
  - Social norms may include smoking

## Smoking-related harm in pregnancy

- Tobacco smoking in pregnancy contributes to high risks of adult and childhood cancers
- Exposed infants more likely to take up smoking at a younger age
- Pre-natal and birthing risks, low birth weight and on-going developmental problems
- Increased risks of chronic respiratory disease, heart disease, diabetes

## Aboriginal and Torres Strait Islanders

- Australian overall 2013 DAILY prevalence 12.8%
- National Indigenous prevalence 42%
- Smoking in pregnancy 49.3%
- But also varies widely by region



Adrian (Ringo) Morgan

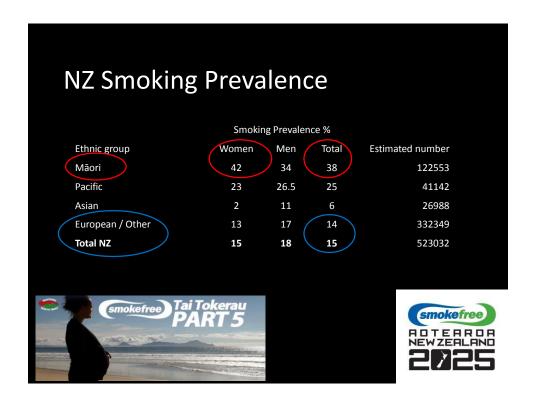
## American Indian / Alaskan Native

- 26% AI/AN
- 14% Whites
- 9% Blacks
- 3% Hispanics
- 2% Asians
- Alaskan Native women also use smokeless tobacco (Iqmik = tobacco leaves + ash)

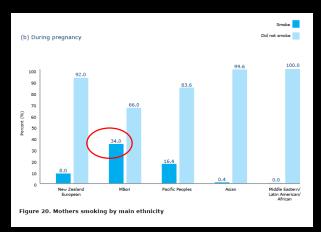


## First Nations - Canada

- Smoking prevalence of First Nations (40%) twice that of non-Indigenous (21%)
- Smoking in pregnancy varies by region:
  - 18% up to 90%
  - Those living on reservations 25%



## Māori pregnant smoking prevalence



SOURCE: Morton SMB, Atatoa Carr PE, Bandara DK, et al. Growing Up in New Zealand: A longitudinal study of New Zealand children and their families. Report 1: Before we are born. Auckland: Growing Up in New Zealand 2010.

But in 2012, NZ College of Midwives report 47% of Māori women smoke in pregnancy

## **Determinants of Indigenous Smoking**

- Poverty
- Younger = higher smoking rates on average (Māori)
- Reproductive age groups highest in Australia, youth rates dropping slowly
- Remoteness (Australia)
- Violence
- Stress
- Racism, discrimination
- Education levels
- Colonisation and stolen generation (Australia)
- · Social norms and maintaining kinship bonds
- Little research in Al/AN women to date

#### Barriers to cessation

- Few antenatal visits
- Poor antenatal care
- Late/low registration Maternity Care
- Stigma of smoking while pregnant
- Judgmental paternalistic attitudes
- Few positive role models in the community
- Low skills of health professionals to manage smoking in pregnancy
- Lack of suitable forms of free nicotine replacement therapy (Australia)

"Maori women are the heaviest smokers because they are disenfranchised from health and employment" Hawke's Bay District Health Board



# Evidence for interventions in general population (Cochrane reviews)

- Cognitive behavioural therapies and counselling
- Behaviour change techniques
- Nicotine Replacement Therapy
- Contingent Financial Incentives
- Self-help

Not yet been implemented in Indigenous women - only two RCTs have been tried. Pilot studies show promise

## Interventions being trialled

- Bio-feedback to motivate quitting:
  - Carbon monoxide monitors (NZ & NSW, Australia)
  - Urinary cotinine (Alaska)
- Exercise (NZ)
- Incentive schemes for pregnant women, whānau (family) and friends to quit (NZ and Australia)
  - gift pack/vouchers
- Programs at midwifery services include NRT (NSW, Australia)



**Cochrane** 



## Interventions being trialled

- Training health professionals in smoking cessation care and NRT (Australia)
- **Social marketing** programs:
  - By Elders (rural Alaska)
  - TV ads targeted Indigenous smokers (Australia)
- Local Programs e.g. Tackling Indigenous Smoking – 50% target pregnant smokers (Australia)
- Targeted Quitlines (Australia and NZ)





## What Indigenous People Want

- Culturally-based salient interventions
- Holistic
- Wider determinants of smoking
- · Family & whole of tribe
- Elders and 'aunties' to support mums
- · Locally developed & delivered
- Māori women want to use ecigs (vaping)
- Respect sacred use of tobacco



## **Conclusions**

- Research/programs using incentives
- Research into efficacy/safety of vaping for cessation in pregnancy
- Interventions using Indigenous knowledge & practices
- Elders/Aunties to deliver essential messages and support
- Training health professionals

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