

Te Piripohotanga / Healthy Starts

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Reducing respiratory illness in
Indigenous infants in Darwin,
Australia and Auckland, Aotearoa



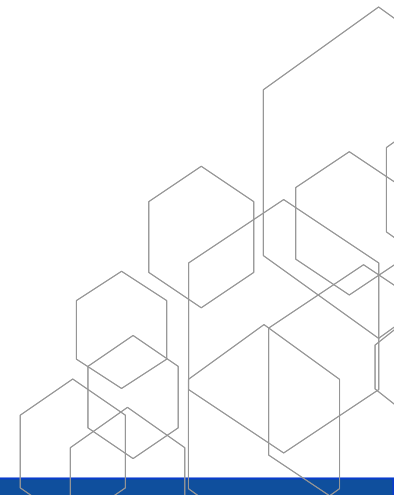


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Te Piripohotanga / Healthy Starts



- A trial of a whanau/family-based tobacco control program about environmental smoke exposure
- Aim is to reduce respiratory illness in indigenous infants
- Undertaken in Darwin (Australia) and South Auckland (NZ)
- NZ Steering committee
 - University of Auckland
 - Centre for Tobacco Control Research
 - National Institute for Health Innovation
 - Counties Manukau District Health Board
- Funded by HRC (IIOF grant)

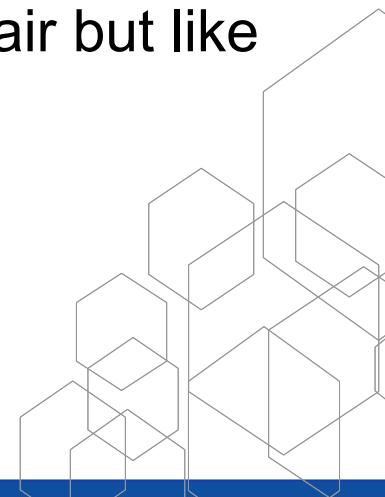




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Te Piripohotanga - NZ

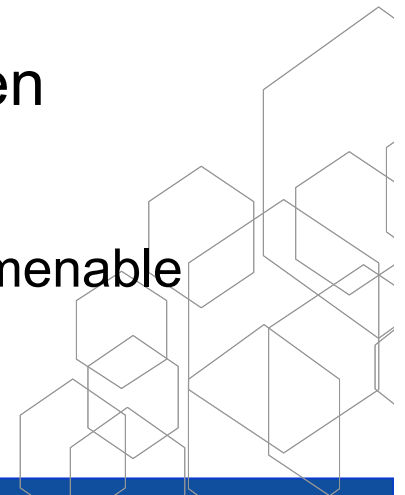
- Te Piripohotanga
 - The stage of life between 0- 2 years old.
 - “Piripoho” is an ancient Maori term for babies.
 - There is an old Maori saying – He piri paua (like a baby paua) which fondly likens some babies who cling to their mother as being like a baby paua clinging to the rock.
 - The paua character is reaching out for understanding that babies need clean air but like paua need clean seas.





Acute respiratory illness (ARI)

- New Zealand
 - Respiratory disease is the leading cause of admission to a public hospital among 1-4 year olds (2003 – 2005).
 - In children aged 0-14 years hospitalisation rates for bronchiectasis (usually the result of repeated severe ARIs) were twice as high in Māori children than non-Māori children
 - 29.1 per 100,000 in Māori compared to 14.2 per 100,000 in non-Māori.
- Multiple determinants of ARIs amongst socioeconomically disadvantaged children
 - Poor housing, water quality, malnutrition, environmental smoke exposure (ETS)
 - ETS exposure is arguably the most readily amenable to modification.



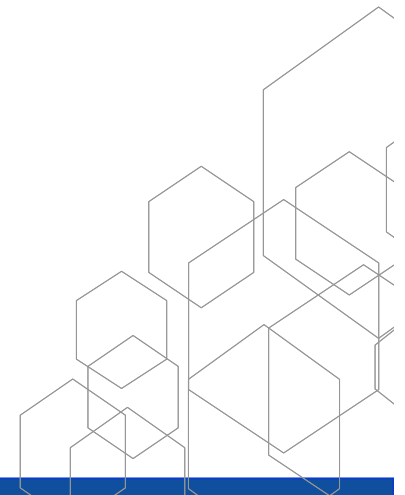


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Environmental smoke exposure

- Association between parental smoking and childhood respiratory disease is strongest at younger ages.
- In children, exposure to ETS is causally related to
 - Frequency and severity of respiratory illness
 - Otitis media
 - Chronic middle ear effusion.
 - Increased risk and/or worsening of pre-existing asthma symptoms
 - Sudden infant death syndrome
 - Increased health service use and costs associated with illness presentations.
- Young people who live in households with people who smoke are more likely to take up smoking
- Prevalence of ETS in children (0-14 yrs)
 - ~66% of Aboriginal children exposed
 - ~20% of Māori children exposed





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Trial design



- Randomised controlled trial single blind
- Community-based
- N=210 in each country
- Inclusion criteria:
 - The infant is aged between 0-5 weeks.
 - Their mother/caregiver identified as Māori
 - Their mother/caregiver is aged 16 years or over.
 - Their mother/caregiver currently smokes or the infant lives in a household where there is at least one other person who smokes (defined as smoking at least weekly).
 - Their mother/caregiver plans to reside permanently with the infant within the CMDHB region





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The Programme

- Intervention groups received:
 - Strategies to reduce infant ETS exposure
 - At home, in car, other places
 - Resources
 - Behavioural coaching
 - Motivation to quit / cessation support
 - Free NRT and Quitline referral
- Control group received :
 - Usual community care
- Both groups received:
 - “Well-baby checks” re safe sleeping, breastfeeding and Immunisation

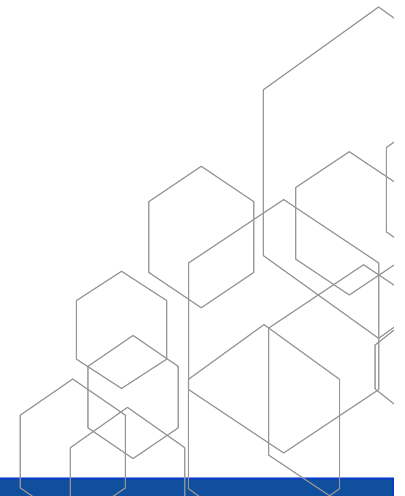




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Recruitment methods in NZ

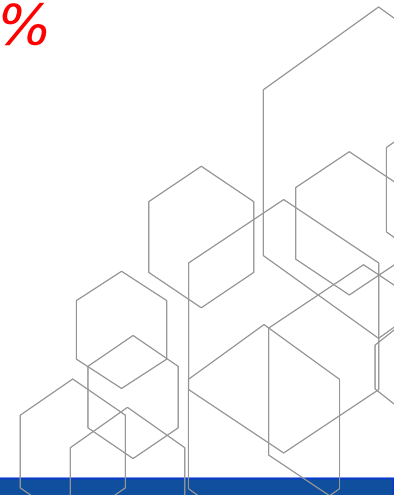
- At birth all new babies were reviewed for eligibility via MMH, then cold-called.
- Some mothers were approached antenatally via supportive networks
 - Turiki Health Services
 - South Auckland Maternity Care Limited
 - Birthing units
 - Papakura Marae
- Community advertising
 - Posters and flyers
 - Direct approach





Recruitment and follow-up

- Strategies were very successful
 - 919 potential participants screened
 - 246 (27%) were uncontactable
 - 201 (22%) were not interested
 - 207 (23%) were ineligible.
 - The remaining 265 were registered
 - 228 participants were randomised
 - Loss to follow-up at 12 months was 12%
 - Took 15 months to recruit





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Outcomes of interest

- *Primary outcome:*
 - Rate of health provider presentations for new primary episodes of acute respiratory illness (ARI) in the first year of life
- *Secondary outcomes:*
 - Measured at baseline (5 months), 4 months, and 12 months of age
 - Rate of hospitalisations for ARI
 - Mothers/caregivers self-report of infant's exposure to ETS (with infant urinary cotinine for validation)
 - Mothers/caregivers self-report of smoking restrictions in the home and car





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Te Taha Tinana (Physical)

- Nicotine replacement therapy (NRT) to mother/caregiver and family members
- NRT patches and/or gum
- Physically walk away from triggers, make the house & car smokefree
- Physical activity
- Nutrition to support quitting





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Te Taha Hinengaro (Mental)

- Motivational Interviewing
- Self-efficacy





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Te Taha Whanau (Family)

- Involve as many extended family members as possible
- Emphasise +ve benefits for infant and family of smokefree home and car
- Identify sources of support in household
- Identify obstacles to support
- Hopefully families will role model change in community

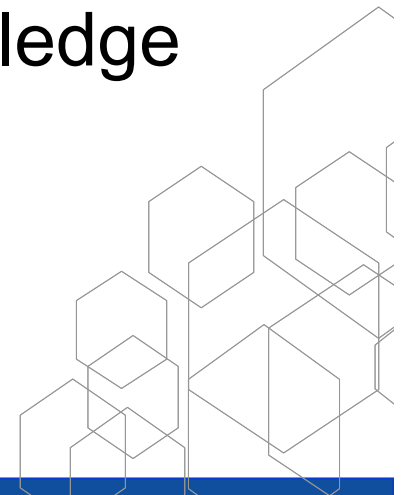




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Te Taha Wairua (Spiritual)

- Kaumatua oversight/support of project
- Attendance to tikanga
- Is attended to by having local Indigenous community health workers deliver the program
- Can incorporate a spiritual aspect to family program drawing on your cultural knowledge and expertise





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Koha at each visit



Swing card with narrative





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Koha





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Issues arising and solutions

Understanding tikanga is crucial to the trial

- Every contact matters.
- Maori and Aboriginal people open their hearts primarily through relationships.
- If we get it wrong at any stage of this vital process we could lose a mum in a flash.
- The preamble for this study therefore constitutes a huge amount of our time and energy but is worth it for a really good outcome.

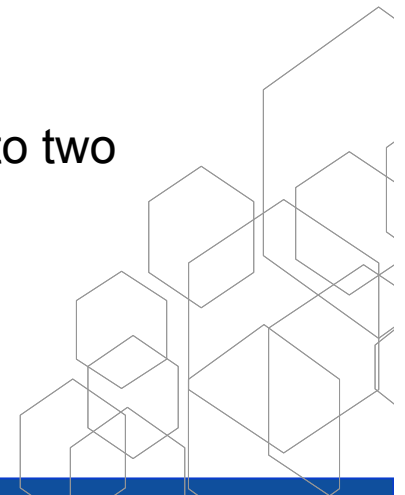




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Issues arising and solutions

- Babies not producing urine: Leave the home and return later once Mum has contacted us to say baby has a wet nappy
- In NZ almost all the homes we visited were smoke free: This means the message has got through to Gen Y mums.
- Mums moving house or changes to vital contact details. Next of kin details needed. Must be accurate and checked for update at every visit
- Other children (toddlers) in house: Taking toys or finding innovative ways to amuse extra children while we talk to Mum
- Scheduling: Working as a team. Divided ourselves into two clear teams plus set up a central online calendar.
- Fear, suspicion, mistrust: Mainly in Australia

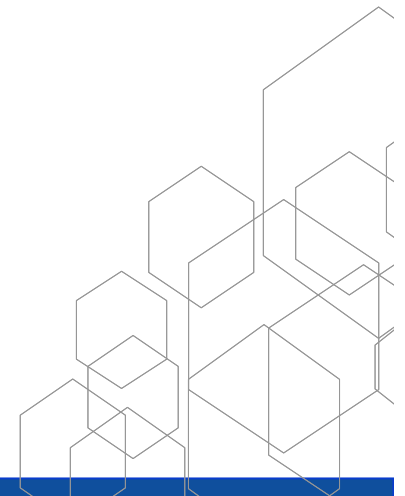




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And if it works....

- Showcase the study around NZ
- Adapt for other populations
 - NZ
 - International





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NZ team





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