# Healthy playgrounds: Do it yourself monitoring



New Zealand Public Health Association Conference Christchurch, October 2017

George Thomson, Nick Wilson, Ryan Gage University of Otago, Wellington, NZ



#### Aim

To develop simple methods for researching and routine monitoring of three aspects of healthy play spaces:

- Drinking water
- Shade
- Smokefree signs

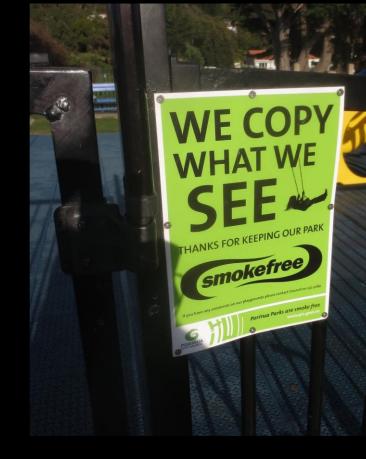


#### Background

- Playgrounds can be a crucial space for child health because of:
  - Green space and trees
  - Opportunities to play safely outdoors
- Advocates need systematic data so as to inform local and central governments
- While there a number of audit guides for recreation spaces, there is a lack of *simple* methods that health workers and advocates can use

#### Methods - General

- Lists of playgrounds from:
  - Council websites
  - Phone or visit councils
  - Google Earth survey



- Survey within 10-100m of playground
- Record name and location of playground

### Methods: Drinking water

- Photos of:
  - Context from 10m away
  - Fountains including taps and dog bowls
  - Of water flow
  - Close-up of nozzle

- Test taps
- Note issues



## Results: Drinking water





#### Methods: Health related signs

• Photos of all signage within 10 metres of the playground equipment

• Measure the largest signs for each subject matter found (smoking, dogs, alcohol and sun-safety) with a tape measure

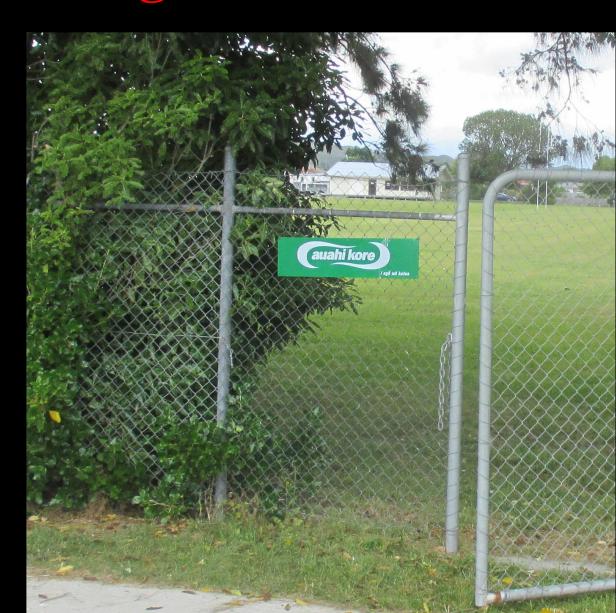
Note issues



### Results: Health related signage



## Results: Te reo signs



## Results: Sign size and quality



#### Methods: Shade

- Visit or locate using Google Street View (where available) and Google Earth
- Estimate the *noon summer shade coverage* (% of area) for:
  - The main-play area
  - Any stand-alone play equipment areas
  - Sitting areas and eating areas within 10 m of the main play area

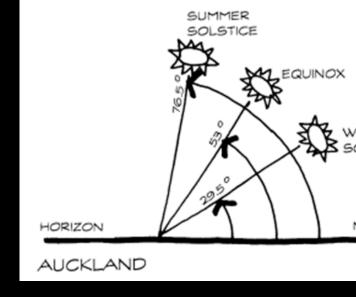


#### Methods: Shade

- Classify area as having:
  - Insufficient (Under 20% cover)
  - Partly sufficient (20-50%)
  - Sufficient (Over 50%)



- Permanent (e.g. fixed structures) or
- Temporary (e.g. large umbrellas)



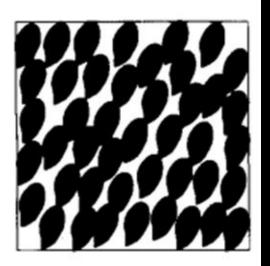
#### heavy - over 90% UVR protection

Good protection from direct UVR. Protection from indirect UVR will depend on canopy size and where a person is positioned under the canopy. Suitable for long-stay use if personal sun protection measures are also used.



#### medium - around 60% UVR protection

Filtered shade provides low levels of protection from direct and indirect UVR. Suitable for short-stay use only. Personal sun protection measures should also be used.



#### light - less than 30% UVR protection

Poor protection from direct and indirect UVR. Suitable for transit shade only.



### Methods: Shade

Use a canopy density guide to classify tree canopies as:

- Heavy (over 90% UVR protection)
- Medium (around 60% of UVR protection) or
- Light (less than 30% UVR protection)

#### For more information see:

https://cancernz.org.nz/assets/Sunsmart/Sunsmart-resources/Guidelines-Under-Cover.pdf



#### **Discussion**

- Data can help advocates and officials with local government
- Even when there is a smokefree playground *law*, a need to monitor best practice implementation



#### Contact: george.thomson@otago.ac.nz

