

Table 1: Baseline characteristics.

Preschool characteristics	Intervention N=85 (n, %)	Control N=86 (n, %)
Number of children preschool licenced for:		
40	48 (57)	47 (55)
75	37 (43)	39 (45)
Age group preschool licenced for:		
0–5 years	43 (51)	44 (51)
2–5 years	42 (49)	42 (49)
Number of children aged 2-5 years		
Total	4,599	4,855
Mean per preschool (SD)	54 (21)	57 (26)
Number of asthma related events at the preschool in the last year		
Mean (SD)	6.4 (11.9)	5.5 (11.2)
All asthmatic children were known to lead teacher	55 (65)	63 (73)
Preschool had asthma-specific guidelines	11 (13)	9 (11)
Characteristics of children	Intervention N=341 (n, %)	Control N=334 (n, %)
Female	133 (39)	142 (43)
Age (years)		
Mean (SD)	3.2 (0.8)	3.1 (0.8)
Ethnicity		
Māori	87 (26)	66 (20)
Pacific	56 (16)	48 (14)
Other (non-Māori, non-Pacific)	198 (58)	220 (66)
Deprivation index^a		
By census area unit (Mean, SD)	5.9 (2.5)	5.8 (2.2)
Diagnosed with asthma	203 (60)	163 (49)
Māori	55 (63)	33 (50)
Pacific	36 (64)	26 (54)
Other (non-Māori, non-Pacific)	112 (57)	104 (47)

Table 1 (continued): Baseline characteristics.

Preschool characteristics	Intervention N=85 (n, %)	Control N=86 (n, %)
High probability of asthma^a	138 (40)	171 (51)
Used an asthma inhaler AND	123 (36)	157 (47)
Had a recurrent wheeze	126 (37)	126 (38)
Had a dry cough	117 (34)	153 (46)
Had a history of atopy		
Age diagnosed with asthma (years)		
Mean (SD)	1.8 (0.8)	1.8 (0.8)
Family history of asthma	292 (86)	282 (84)

SD: Standard deviation.

^a For preschool location, where 1 is least deprived and 10 is most deprived area of New Zealand by NZDep2006.²²

* None of these children went on to get a medical diagnosis of asthma during the study.

Table 2: Acute asthma events in children over the last 12 months.

	Intervention N=341 (n, %)	Control N=334 (n, %)	Adjusted Odds Ratio (95% CI)	P-value
Number of children with at least one event in the last 12 months	216 (63)	181 (54)	1.35 (0.95–1.92) ^a 1.22 (0.85–1.74) ^b 1.36 (0.95–1.94) ^c 1.27 (0.77–2.10) ^d	0.095 0.286 0.095 0.352
Subgroup analyses				
- Asthma diagnosis	133 (66)	97 (60)	1.29 (0.84–1.99)	0.247
- High probability of asthma	83 (60)	84 (49)	1.49 (0.90–2.47)	0.117
Hospitalisations in the last 12 months	6 children* (8 events, 1.4% of all 577 events)	2 children (2 events, 0.4% of all 466 events)	–	–

^a Adjusted for stratification factors (preschool licence size, preschool age group) and asthma inclusion criteria (asthma diagnosis, high probability of asthma).

^b Adjusted for same factors as in ^a, but also asthma inhaler technique (good, medium, poor) and deprivation index.²²

^c Adjusted for same factors as in ^b, but also ethnicity (Māori, Pacific, Other).

^d Adjusted for same factors as in ^c, but also age group (<3 years, ≥3 years), medication use (defined as “using an inhaled corticosteroid twice a day every day”) and symptoms (defined as “waking ≥3 times per week or every night”).

*One child died.

CI=Confidence Interval.