



Appendix

**This appendix was part of the submitted manuscript and has been peer reviewed.
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Appendix to: Knibbs LD, Woldeyohannes S, Marks GB, Cowie CT. Damp housing, gas stoves, and the burden of childhood asthma in Australia. *Med J Aust* 2018; 208: 299-302. doi: 10.5694/mja17.00469.

Online appendix for:

Damp housing, gas stoves and the burden of childhood asthma in Australia

Methods

Search terms to identify studies reporting residential dampness estimates in Australia (up to October, 2016)

PubMed

(australia[MeSH terms] OR australia[Title/Abstract]) AND damp*[Title/Abstract] OR australia[Title/Abstract] OR australia[MeSH terms] AND (fungi[Title/Abstract] OR mould[Title/Abstract]) AND (indoor[Title/Abstract] OR household[Title/Abstract] OR home[Title/Abstract])

Web of Science

TS=(damp* AND australia), TS=(australia) AND (TS=(fungi) OR TS=(mould)) AND (TS=(indoor) OR TS=(household) OR TS=(home))

Scopus

TITLE-ABS-KEY(australia) AND (TITLE-ABS-KEY(damp*), TITLE-ABS-KEY(australia) AND (((TITLE-ABS-KEY(fungi) OR TITLE-ABS-KEY(mould)) AND (TITLE-ABS-KEY(indoor) OR TITLE-ABS-KEY(household) OR TITLE-ABS-KEY(home))))))

Google Scholar

australia indoor "dampness" OR "mould"

Search terms to identify meta-analyses on dampness and childhood asthma (up to October 2016; published from 2011 onwards only)

PubMed

(damp*[Title/Abstract] OR mould[Title/Abstract] OR mould[Title/Abstract] OR fungi[Title/Abstract]) AND asthma[MeSH terms] AND meta[Title/Abstract]

Search terms to identify meta-analyses on gas stoves and childhood asthma (up to October 2016; published from 2011 onwards only)

PubMed

gas*[Title/Abstract] AND asthma[MeSH terms] AND meta[Title/Abstract]

Results

References 1 through 9 are the studies reporting dampness identified through the literature search and which were used to derive population-weighted dampness estimates.

Tables A1 and A2 present the sensitivity of PAF and burden estimates to changes in individual parameters.

Table 1. Sensitivity of dampness estimates. ^a base scenario for dampness, using overall population-weighted dampness prevalence (n = 7538 homes), effect estimate for exposure to dampness and new (i.e. incident) asthma reported by Quansah et al. (2012),¹⁰ children ≤14 years only.

Scenario	Proportion exposed (s.d.)	Outcome	Effect size (95% CI)	Age	PAF (95% CI)	DALYs (95% CI)
Dampness^a	0.261 (0.094)	New asthma	1.33 (1.12-1.56)	≤14 years	0.079 (0.031-0.126)	1760 (416-3104)
Excluding large Tasmanian study ⁹ (leaving n = 3,413 homes after it was excluded)	0.237 (0.093)	New asthma	1.33 (1.12-1.56)	≤14 years	0.072 (0.027-0.117)	1606 (337-2876)
Any exposure (i.e., dampness, water damage, visible mould or mould odour)	0.261 (0.094)	New asthma	1.35 (1.23-1.49)	≤14 years	0.083 (0.048-0.118)	1864 (695-3034)
Age ≤19	0.261 (0.094)	New asthma	1.33 (1.12-1.56)	≤19 years	0.079 (0.031-0.126)	2508 (578-4439)

Table 2. Sensitivity of gas stove estimates. ^b base scenario for gas stoves, using overall gas stove prevalence ($n = 12,841$ households), effect estimate for exposure to gas stoves and all asthma (i.e. current + lifetime asthma) reported by Lin et al. (2013),¹¹ children ≤ 14 years only.

Scenario	Proportion exposed (s.e.)	Outcome	Effect size (95% CI)	Age	PAF (95% CI)	DALYs (95% CI)
Gas stoves^b	0.382 (0.008)	All asthma (current + lifetime)	1.37 (1.22-1.53)	≤ 14 years	0.123 (0.089-0.158)	2756 (1271-4242)
Current asthma	0.382 (0.008)	Current asthma	1.49 (1.28-1.73)	≤ 14 years	0.157 (0.116-0.198)	3504 (1657-5351)
Lifetime asthma	0.382 (0.008)	Lifetime asthma	1.29 (1.09-1.53)	≤ 14 years	0.099 (0.046-0.152)	2200 (623-3777)
Age ≤ 19	0.382 (0.008)	All asthma (current + lifetime)	1.37 (1.22-1.53)	≤ 19 years	0.123 (0.089-0.158)	3938 (1895-5981)
75% reduction in	0.096 (0.008)	All asthma	1.37 (1.22-1.53)	≤ 14 years	0.034 (0.022-	761 (322-1199)

exposure to gas combustion due to externally vented range hood ¹²		(current + lifetime)			0.046)	
	0.096 (0.008)	Current asthma	1.49 (1.28-1.73)	≤14 years	0.045 (0.030-0.060)	996 (430-1563)
	0.096 (0.008)	Lifetime asthma	1.29 (1.09-1.53)	≤14 years	0.027 (0.011-0.043)	600 (142-1058)

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