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Home interventions are effective at decreasing indoor nitrogen dioxide concentrations

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Supplemental Table 1: Percentage of homes at each sampling visit with a decrease in median indoor NO_2 following intervention

Percentage of homes with decrease in NO_2*	1 week	3 months
KITCHEN		
Air purifier (n=46)	76.1%	65.9%
Ventilation hood (n=15)	35.7%	26.7%
Stove (n=17)	68.8%	87.5%
BEDROOM		
Air purifier (n=46)	60.9%	53.7%
Ventilation hood (n=15)	64.3%	29.6%
Stove (n=17)	68.8%	75.0%

*By chance alone, 50% of homes would be expected to have a reduction in NO_2 concentrations.

Supplemental Table 1: Percentage of homes at each sampling visit with a decrease in median NO_2 following intervention. Lists the percentage of homes within each study group (stove replacement, air purifier, ventilation hood) that had a decrease in NO_2 concentration at 1 week and 3 months of follow up, shown for both kitchen and bedroom. (NO_2=nitrogen dioxide)

Supplemental Table 2: Median indoor NO_2 by location, study arm, and sampling visit

KITCHEN NO_2 (ppb) Median (range)	Baseline	1 Week	Mann-Whitney Wilcoxon signed rank test p-value WITHIN GROUP	3 months	Mann-Whitney Wilcoxon signed rank test p-value WITHIN GROUP
Air purifier (n=46)	19.2 (6.8, 85.3)	14.1 (2.7, 58.6)	**<0.01**	15.5 (0.1, 74.7)	**0.05**
Ventilation hood (n=15)	12.2 (3.2, 53.3)	25.5 (4.7, 51.2)	0.14	24.7 (6.5, 49.8)	0.11
Stove (n=17)	19.7 (9.2, 70.2)	10.9 (4.3, 98.6)	0.18	9.7 (3.4, 36.9)	**0.01**
Krushkal-Wallis test p-value BETWEEN GROUPS	0.21	**0.04**		**<0.01**	
BEDROOM NO_2 (ppb) Median (range)	Baseline	1 Week	Mann-Whitney Wilcoxon signed rank test p-value WITHIN GROUP	3 months	Mann-Whitney Wilcoxon signed rank test p-value WITHIN GROUP
Air purifier (n=46)	12.4 (3.4, 35.1)	9.7 (1.9, 38.3)	**0.02**	11.5 (3.2, 92.6)	0.41
Ventilation hood (n=15)	13.1 (5.3, 39.2)	14.2 (3.1, 41.7)	0.68	18.2 (5.7, 35.5)	0.18
Stove (n=17)	16.9 (6.9, 41.8)	11.6 (4.9, 40.8)	0.23	9.8 (2.3, 21.9)	**0.01**
Krushkal-Wallis test p-value BETWEEN GROUPS	0.68	0.35		**0.03**	

Supplemental Table 2: Median indoor NO_2 by location, study arm, and sampling visit. Lists median and range of indoor NO_2 concentrations for each room (kitchen and bedroom) by study arm (stove replacement, air purifier, ventilation hood) and for each monitoring visit (baseline, 1 week, 3 month). (NO_2=nitrogen dioxide, ppb=parts per billion)

Supplemental Table 3: Median ambient NO_2 by study arm and sampling visit

	Ambient NO_2 (ppb)			
	Baseline	1-week	3-month	Kruskal-Wallis test p-value for differences in ambient NO_2 at baseline and follow-up
All groups combined	28.8	29.8	28.9	0.71
Air purifier	28.3	29.4	28.3	0.68
Ventilation hood	31.5	31.6	29.3	0.46
Stove replacement	26.3	29.8	29.8	0.39
Kruskal-Wallis test p-value for differences in ambient NO_2 by study arm	0.14	0.58	0.85	

Supplemental Table 3: Median ambient NO_2 by study arm and sampling visit. Lists value of median ambient NO_2 concentration from the Baltimore City EPA monitoring site, by study arm (stove replacement, air purifier, ventilation hood) and for each monitoring visit (baseline, 1 week, 3 month). (NO_2=nitrogen dioxide, ppb=parts per billion)

Supplemental Table 4: Median change in NO_2 (ppb) by pilot light

	Kitchen		Bedroom	
Air purifier	1 week-baseline	3 months-baseline	1 week-baseline	3 months-baseline
Continuous pilot light n=11	-3.3	-6.6	-4.9	-0.1
Auto ignite pilot light n=34	-1.5	-2.0	-1.3	-0.9
Krushkal-Wallis test p-value	**0.04**	0.37	0.07	0.98
	Kitchen		Bedroom	
Vent hood	1 week-baseline	3 months-baseline	1 week-baseline	3 months-baseline
Continuous pilot light n=3	7.3	9.9	-1.3	5.6
Auto ignite pilot light n=12	7.1	8.6	-1.9	1.1
Krushkal-Wallis test p-value	0.39	1.0	0.94	0.70
	Kitchen		Bedroom	
Stove	1 week-baseline	3 months-baseline	1 week-baseline	3 months-baseline
Continuous pilot light n=5	-10.4	-8.0	-4.3	-16.0
Auto ignite pilot light n=11	-3.2	-9.5	-1.2	-5.0
Krushkal-Wallis test p-value	0.33	0.61	0.40	0.13

Supplemental Table 4: Median change in NO_2 by presence of continuous pilot light, location, study arm, and sampling visit. Lists value of median change in NO_2 concentration between homes with a continuous pilot light and those with an auto ignite pilot light, for each room (kitchen and bedroom) by study arm (stove replacement, air purifier, ventilation hood) and for each monitoring visit (baseline, 1 week, 3 month). (NO_2=nitrogen dioxide, ppb=parts per billion)