Supplementary material to article by J. H. Alfonso et al. "Self-reported Occupational Exposure to Chemical and Physical Factors and Risk of Skin Problems: A 3-year Follow-up Study of the General Working Population of Norway"

Table SIII. Multiple logistic regression: self-reported skin problems at follow-up (2009) regressed on changes in self-reported work-related exposures from baseline (2006) to follow-up (2009)

	Total	Cases, <i>n</i> (%)	Model #1 OR (95% CI)	Model #2 OR (95% CI)	Model #3 OR (95% CI)	Model #4 OR (95% CI)	PAR ^a % (95% CI)
1. Water							
Unexposed	5,161	559 (10.8)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	
Exposed only at baseline	340	44 (12.9)	1.2 (0.9–1.7)	1.1 (0.8–1.6)	1.0 (0.7–1.5)	1.0 (0.7–1.5)	
Exposed only at follow-up	614	82 (13.4)	1.3 (1.0–1.6)*	1.3 (1.0–1.7)*	1.3 (1.0–1.9)*	1.3 (1.0–1. 9)	
Exposed at both time-points	595	98 (16.5)	1.6 (1.3–2.0)**	1.5 (1.1–1.9)**	1.4 (1.1–1.9)*	1.4 (1.1–1.9)*	4.4 (0.2–8.9)
Missing	35	3	1.0 (1.5 2.0)	1.5 (1.1 1.5)	1.1 (1.1 1.)	1.1 (1.1 1.5)	1.1 (0.2 0.5)
2. Cleaning products	33	3					
Unexposed	5,703	621 (10.9)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	
Exposed only at baseline	326	39 (12.0)	1.1 (0.8–1.6)	1.1 (0.8–1.7)	1.1 (0.8–1.7)	1.1 (0.8–1.7)	
Exposed only at follow-up	419	73 (17.4)	1.7 (1.3–2.2)**	1.8 (1.3–2.5)**	1.8 (1.3–2.4)**	1.8 (1.3–2.4)**	4.1 (1.4–7.0)
Exposed at both time-points	268	52 (19.5)	2.0 (1.4–2.7)**	1.7 (1.2–2.4)**	1.7 (1.2–2.5)**	1.7 (1.2–2.5)**	3.2 (0.5–6.2)
	208	1	2.0 (1.4–2.7)	1.7 (1.2–2.4)	1.7 (1.2–2.3)	1.7 (1.2–2.3)	3.2 (0.3–6.2)
Missing	29	1					
3. Oil/cutting fluids	()7(710 (11 4)	1.6.0	1.(0	1 (0	1 (0)	
Unexposed	6,276	718 (11.4)	1 (ref)	1 (ref)	1 (ref)	1 (ref) ^a	
Exposed only at baseline	156	20 (12.8)	1.1 (0.7—1.8)	1.1 (0.7–2.0)	1.3 (0.8–2.2)	1.3 (0.7–2.2)	
Exposed only at follow-up	159	24 (15.1)	1.4 (0.9–2.1)	1.5 (0.9–2.5)	1.6 (1.0–2.7)*	1.4 (0.8–2.3)	
Exposed at both time-points	128	23 (18.0)	1.7 (1.0–2.7)*	1.6 (0.1–2.7)	1.8 (1.1–3.2)*	1.6 (0.9–2.7)	
Missing	26	1					
4. Cold							
Unexposed	5,586	635 (11.4)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	
Exposed only at baseline	393	54 (13.7)	1.2 (0.9–1.7)	1.1 (0.8–1.6)	1.2 (0.8–1.6)	1.2 (0.8–1.6)	
Exposed only at follow-up	362	44 (12.2)	1.1 (0.8–1.5)	1.1 (0.8–1.6)	1.1 (0.8–1.6)	1.1 (0.8–1.6)	
Exposed at both time-points	353	48 (13.6)	1.2 (0.9-1.7)	1.2 (0.9–1.7)	1.3 (0.9–1.9)	1.3 (0.9–1.9)	
Missing	51	5					
5. Heat							
Unexposed	5,980	686 (11.5)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	
Exposed only at baseline	47	4 (8.5)	0.7 (0.3–2.0)	0.5 (0.1–1.4)	0.5 (0.2-0.4)	0.5 (0.2–0.4)	
Exposed only at follow-up	229	36 (15.7)	1.4 (1.0-2.1)*	1.8 (1.2–2.7)**	1.8 (1.2–2.7)**	1.8 (1. 2–2.7)**	2.3 (0.4-4.5)
Exposed at both time-points	114	15 (13.2)	1.2 (0.7–2.0)	1.0 (0.6–1.9)	1.0 (0.5–1.9)	1.0 (0.5–1.9)	,
Missing	375	45	((, , , , , , , , , , , , , , , , , ,	(()	()	
6. Indoor dry air							
Unexposed	5,068	545 (10.8)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	
Exposed only at baseline	757	107 (14.1)	1.4 (1.1–1.7)**	1.3 (1.0–1.6)	1.2 (1.0–1.6)	1.2 (1.0–1.6)	
Exposed only at follow-up	506	69 (13.6)	1.3 (1.0–1.7)*	1.3 (1.0–1.8)	1.3 (0.9–1.7)	1.3 (0.9–1.7)	
Exposed at both time-points	384	64 (16.7)	1.7 (1.2–2.2)**	1.6 (1.2–2.2)**	1.6 (1.1–2.1)**	1.6 (1.1–2.1)**	2.9 (0.4–5.8)
Missing	30	04 (10.7)	1.7 (1.2–2.2)	1.0 (1.2–2.2)	1.0 (1.1–2.1)	1.0 (1.1–2.1)	2.9 (0.4–3.6)
7. Metal dust/fumes	30	U					
	(170	752 (11.0)	1 (6)	1 (1 (1 (Oh	
Unexposed	6,478	752 (11.6)	1 (ref)	1 (ref)	1 (ref)	1 (ref) ^b	
Exposed only at baseline	95	12 (12.6)	1.1 (0.6–2.0)	1.0 (0.5–1.9)	1.0 (0.5–2.1)	1.0 (0.5–2.1)	
Exposed only at follow-up	74	13 (14.9)	1.3 (0.7–2.4)	1.6 (0.8–3.0)	1.6 (0.8–3.1)	1.3 (0.7–2.6)	
Exposed at both time-points	25	4 (13.8)	1.2 (0.4–3.5)	1.0 (0.3–3.4)	1.1 (0.3–3.7)	0.9 (0.3–3.1)	
Missing	56	5					
8. Mineral dust/fumes							
Unexposed		739 (11.5)		1 (ref)	1 (ref)	1 (ref)	
Exposed only at baseline	117	18 (15.4)	1.4 (0.8–2.3)	1.6 (0.9–2.7)	1.7 (0.9–3.0)	1.7 (0.9–3.0)	
Exposed only at follow-up	97	15 (15.5)	1.4 (0.8–2.4)	1.3 (0.7–2.5)	1.4 (0.7–2.6)	1.4 (0.7–2.6)	
Exposed at both time-points	43	8 (18.6)	1.8 (0.8–3.8)	1.0 (0.4–2.4)	1.1 (0.5–2.8)	1.1 (0.5–2.8)	
Missing	39	6					
9. Organic dust/fumes							
Unexposed	6,116	687 (11.2)	1 (ref)	1 (ref)	1 (ref)	1 (ref)	
Exposed only at baseline	283	43 (15.2)	1.4 (1.0–1.2)*	1.2 (0.9–1.8)	1.3 (0.9–1.8)	1.3 (0.9–1.8)	
Exposed only at follow-up	212	37 (17.5)	1.7 (1.2–2.4)**	1.6 (1.0–2.4)*	1.6 (1.0–2.4)*	1.6 (1.0–2.4)*	1.9 (-0.1-4.2
Exposed at both time-points	95	12 (12.6)	1.1 (0.6–2.1)	1.0 (0.5–2.0)	1.0 (0.5–2.3)	1.0 (0.5–2.3)	(0 1.2
Missing	39	7	()	(2.0)	(2.0)	()	

^aPAR based on model #4.

Model #1: crude analysis. Model #2: adjusted for skin problems at baseline. Model #3: further adjusted for sex, age, and occupation. Model #4: further adjusted for work related exposures yielding a 10% change of OR; "further adjusted for cleaning products; "further adjusted for cleaning products and indoor dry air. CI: confidence interval; OR: odds ratio; PAR: population-attributable risk. $*p \le 0.05$; $**p \le 0.01$.