

**Appendix 1. The association between baseline HbA<sub>1c</sub> and Incidence of high frequency hearing impairment (n=126,823).**

		HbA <sub>1c</sub> (%) (mmol/mol)							P for quadratic
		<5.0 (<31)	5.0-5.4 (31-36)	5.5-5.9 (37-41)	6.0-6.4 (42-46)	6.5-6.9 (48-52)	7.0-7.9 (53-63)	≥8 (≥64)	
<b>Men</b>	Person-year	44,265	227,740	215,647	36,368	9,184	8,148	8,888	
	No.cases	229	1,345	1,535	329	91	99	100	
	non-smoker	0.94 (0.73 to 1.20)	1.00	0.93 (0.82 to 1.05)	0.89 (0.73 to 1.07)	0.68 (0.48 to 0.96)	1.10 (0.80 to 1.53)	1.37 (1.00 to 1.88)	0.01
	smoker	1.06 (0.89 to 1.26)	1.00	0.95 (0.86 to 1.05)	0.91 (0.77 to 1.07)	1.00 (0.76 to 1.31)	1.10 (0.84 to 1.44)	1.04 (0.79 to 1.37)	0.23
<b>Women</b>	Person-year	22,749	110,979	114,327	19,601	3,143	2,062	1,813	
	No.cases	19	140	214	48	15	11	13	
	non-smoker	1.11 (0.65 to 1.91)	1.00	0.92 (0.72 to 1.18)	0.88 (0.61 to 1.26)	1.28 (0.69 to 2.35)	1.47 (0.73 to 2.94)	2.83 (1.53 to 5.24)	0.005

Adjusted for age, walking time, alcohol consumption, self-reported diabetes, BMI, hypertension, hyperlipidemia and job type.