

Supplementary Online Content

Su BM, Chan DK. Prevalence of hearing loss in US children and adolescents: findings from NHANES 1988-2010. *JAMA Otolaryngol–Head Neck Surg*. Published online: July 27, 2017. doi:10.1001/jamaoto.2017.0953

eTable. Significant odds ratios from multivariate regression models

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable. Significant odds ratios from multivariate regression models

NHANES III						
			Odds Ratio	95% CI		p
Hearing Loss \geq 20 dB	3+ ear infections	Yes	3.157	1.608	6.198	0.0013
Hearing Loss \geq 15 dB	Sex	Male	1.422	1.002	2.019	0.0491
	3+ ear infections	Yes	1.6	1.088	2.354	0.018
LFHL	3+ ear infections	Yes	2.272	1.402	3.681	0.0013
HFHL	Sex	Male	1.615	1.139	2.29	0.0082
	PIR category	1.4 - 3.5	0.757	0.494	1.162	0.1977
		> 3.5	0.563	0.323	0.979	0.0421
	3+ ear infections	Yes	1.501	1.012	2.226	0.0436
NITS	Age	14-15	0.776	0.462	1.304	0.3312
		16-17	0.985	0.616	1.573	0.9477
		18-19	1.818	1.104	2.993	0.0198
	Sex	Male	1.764	1.294	2.404	0.0006
NHANES 2005-2006						
			Odds Ratio	95% CI		p
Hearing Loss \geq 20 dB	Age	14-15	1.938	0.602	6.239	0.2462
		16-17	1.474	0.514	4.223	0.4446
		18-19	2.81	1.024	7.712	0.0454
	Sex	Male	1.256	0.707	2.228	0.0454
Hearing Loss \geq 15 dB	Sex	Male	1.388	1.046	1.841	0.0259
HFHL	Sex	Male	1.593	1.17	2.17	0.0058
NITS	Age	14-15	1.332	0.642	2.765	0.4153
		16-17	2.218	1.252	3.93	0.0096
		18-19	0.908	0.457	1.802	0.7674
NHANES 2007-2008						
			Odds Ratio	95% CI		p
LFHL	PIR category	1.4 - 3.5	0.759	0.444	1.298	0.2927
		> 3.5	0.367	0.179	0.752	0.0092
NITS	Sex	Male	0.53	0.34	0.827	0.0081
NHANES 2009-2010						
			Odds Ratio	95% CI		p
Hearing Loss \geq	3+ ear infections	Yes	2.923	1.363	6.269	0.0088

20 dB						
	Firearm use	Yes	2.191	1.109	4.332	0.0267
Hearing Loss \geq 15 dB	Race/ Ethnicity	Non-Hispanic white	0.66	0.444	0.976	0.0389
	PIR category	1.4 - 3.5	0.929	0.582	1.482	0.7422
		> 3.5	0.538	0.295	0.979	0.0434
	3+ ear infections	Yes	2.159	1.463	3.185	0.0007
LFHL	Race/ Ethnicity	Non-Hispanic white	0.484	0.279	0.84	0.0131
	3+ ear infections	Yes	2.902	1.623	5.188	0.0013
	Firearm use	Yes	2.694	1.723	4.211	0.0002
HFHL	3+ ear infections	Yes	2.039	1.443	2.88	0.0005

Reference groups are, respectively: age 12-13, female sex, all other racial/ethnic groups, PIR \leq 1.3, answers of "no" for noise exposure/firearm/hearing protection use.

White, non-Hispanic category is modeled as vs. all other groups due to small sample size.

Hearing aid use: not included in models due to small sample size.

NHANES = National Health and Nutrition Examination Survey.

PIR = poverty income ratio

HFHL = high-frequency hearing loss. LFHL = low-frequency hearing loss.

NITS: noise-induced threshold shifts.