

Re: Kongerud J, Vale JR, Aalen OO. Questionnaire reliability and validity for aluminum potroom workers. *Scand J Work Environ Health* 1989;15:364—70.

In this article the authors presented an evaluation of respiratory questionnaires for aluminum potroom workers. Unfortunately, the validity measures in table 5 were calculated in an inappropriate way. As explained in the paper, the number of subjects examined by a clinical interview included the majority (90 of 101) of those positive on the self-administered questionnaire, but only a random sample (44 of 195) of the negative ones. In the original paper the authors did not correct for the fact that these two sampling fractions were unequal. One can easily carry out a correction by first constructing 2×2 tables (see the original paper) separately for those negative and those positive on the self-administered questionnaire and thereafter combining the tables using the inverse sampling fractions as weights. The validity measures are then calculated as described in the original paper. The results are given in the accompanying corrected version of table 5.

The effect of the correction is some decrease in sensitivity and an increase in specificity and in the kappa values. However, the overall result does not change much and the main conclusions are unaffected.

Table 5. Validity of some of the questions included in the self-administered respiratory questionnaire as compared with data in a clinical history.^a

Variable	Sensitivity (%)	Specificity (%)	Agreement (kappa)	Standard error ^b
Dyspnea	75	88	0.63	0.07
Wheezing	77	82	0.60	0.12
Dyspnea and wheezing	75	93	0.65	0.09
Cough	55	88	0.45	0.08
Allergy	42	99	0.53	0.13
History of asthma	50	98	0.21	0.26
Familial asthma	71	97	0.73	0.08
Smoking habits	99	100	0.98	0.02
Previous work exposure	66	95	0.65	0.08

^a The results are based on the data in table B1 of appendix II.

^b Standard error of the kappa.