# Reliability and factorial validity of a questionnaire to assess organophosphate pesticide exposure to agricultural workers in Maule, Chile

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The aim was to evaluate the reliability and validity of a questionnaire to assess organophosphate pesticide (OP) exposure in agricultural workers. We then enrolled a random sample of 114 agricultural workers from the region of Maule, Chile (mean age = 50 years [SD = 12]). An internal consistency analysis (Cronbach?s alpha> 0.70) and a Varimax rotational factorial analysis were applied. The instrument had a high reliability to predict likely occupational pesticide exposures: Cronbach?s alpha = 0.95, the Kaiser?Meyer?Olkin (KMO) measure was 0.90 and the Bartell sphericity test = $p < 0.001$. Four factors explaining 68% of the variance were extracted. The factors identified were as follows: (1) labor conditions during application of OPs; (2) use of personal protective equipment; (3) workplace conditions related to OP exposure and (4) home conditions related to OP exposure. The questionnaire has