**METHODS**

**Data collection**

Health data

*Non-specific methacholine bronchial challenge test (MBC)*

A linear dose-response slope (DRS) was calculated as the percentage decrease in FEV1 at the last dose divided by the total administered dose.[1](#_ENREF_1) The DRS was normalized in the regression analyses. The normalized dose-response slope transformation

NDRS=1/(DRS  +2.5)

has been found to be optimal in a large unexposed population.[2](#_ENREF_2)

**REFERENCES**

**1.** O'Connor G, Sparrow D, Taylor D, Segal M, Weiss S. Analysis of dose-response curves to methacholine. An approach suitable for population studies. *Am Rev Respir Dis*.1987;136:1412-1417. doi: 10.1164/ajrccm/136.6.1412.

**2.** Bohadana AB, Massin N, Wild P, Kolopp MN, Toamain JP. Respiratory symptoms and airway responsiveness in apparently healthy workers exposed to flour dust. *Eur Respir J*.1994;7:1070-1076. doi: 10.1183/09031936.94.07061070.