Letter to the Editor

Quality of Exposure Data
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Tielemans et al. (2002) make a very valuable proposal with a logical sequence of decisions and main steps for evaluating quality of exposure data. However, they use only bias in considering validity in their step 3. EN 482, the European standard on the requirements for exposure data (European Committee for Standardization, 1994), uses overall uncertainty, a combination of bias and precision, so it is hard to see how Tielemans et al.’s test of validity can be related to EN 482.

The parameter of overall uncertainty is important in EN 482 because its numerical value is specified for particular measurement tasks and measuring ranges. Unfortunately, overall uncertainty is apparently only specified in occupational hygiene and is rarely used even there. Why is this? First, it is not mandatory to use EN 482 in the work environment. Second, high-quality analyses are costly and therefore made in limited numbers, in scientific studies. For routine exposure data, employers are quite satisfied with a minimum quality level, not only because of cost, but also because of employers’ limited understanding of quality. Products appearing on the modern market must meet stringent quality standards, including technologies used, and the environmental and human health safety of materials. But the work environment is considered to be an internal affair of the enterprise where agreement is made between the employer and employee: how much will the employee be paid for agreeing to work despite the health risk? So far, our consumer goods are not marked by a special label that they are produced without environmental or human health risk.

Only when the need for quality is completely understood in its wider sense, may we hope that the issues on quality evaluation of workplace analyses and exposure data will be become an urgent theme beyond the narrow circle of specialists.

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REFERENCES
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