

An Evaluation of the User-friendliness of Tier 1 Tools Used for Exposure Assessment under REACH

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Introduction

The interface between the user and Tier 1 assessment tool is of prime importance in ensuring the effective and straightforward generation and interpretation of exposure estimates.

Methods

The usability and user-friendliness of the tools was explored using telephone interviews (N=11) and an online survey of tool users (N=275). Information on user characteristics such as computer skill level, exposure assessment and tool use experience and employment sector was gathered. Different aspects of tool usability were evaluated including ease of access/ download; quality of software/ interface design and layout; ease of learning to use the tool; ease of generation of estimates and helpfulness of tool guidance/ help functions.

Results

Users were generally happy with the tools & supporting documentation, however learning to use the tools, translating situations into inputs and generating outputs and identifying/ fixing problems were more difficult for some user groups for some tools. Most participants perceived the tools to be appropriately conservative. The tools fulfil the requirements of the majority of users, however a wide range (44~80%) of satisfaction was reported.

Conclusions

The results showed that participants were generally satisfied with the usability and user-friendliness of the tools and supporting documentation. Some differences in ease of use were noted between tools for different user types: the usability of the tools is affected to some degree by the user's knowledge of the underlying tool concepts and their previous experience of tool use and exposure assessment. These differences in perceived user-friendliness between user-types should be considered during future tool development.