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Assessment of Operator, Worker and Bystander Exposure to Agrochemical Products

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During the development of a new agrochemical we will define the nature and magnitude of any residues that may enter the human food and assess the risk associated with these residues. We also investigate the environmental fate of the molecule and assess any impact on ecosystems. The studies we do to assess these human and environmental risks are well established and form part of a regulatory package. However the direct exposure to agrochemicals during manufacture, use and to bystanders needs to be understood in order to protect specific groups of the population from these routes of exposure. A greater level of importance is applied to the assessment of operator, worker and bystander exposure under the new European directive (1107/2009) and as a consequence new study designs are required that will produce data for use in risk assessments.

This presentation will look at the practical/logistical and analytical challenges of conducting these large complex field studies and will outline the approaches taken by the Charles River Field Trials Group. It will also look at current study designs that produce data that can be used in risk assessments and at possible future designs that may be required as we look to measure bystander and resident exposure.