

Toxicology and Risk Assessment

Sound science, defensible studies, and strategic thinking in support of your business operations.



Risk assessments are the quantification of cause and effect. They range from simple calculations to complex analyses based on data from multi-year studies. At Solutions in Science (SiS), we evaluate a client's risk assessment needs, then provide clear and strategic approaches on how to evaluate and manage those needs. We understand how to use risk assessment in a variety of settings and focus resources on the critical aspects of your assessment.

Risk Assessment

SiS has conducted human health and ecological risk assessments throughout the world. These assessments range in complexity from initial screening to multi-chemical, multi-pathway risk assessments. Our assessments provide a realistic and complete picture of risk posed by a product, process, service facility, operation, or waste stream and are presented in a concise, easy to understand manner.

Toxicological Studies

SiS scientists have made substantial contributions to toxicological research through our analysis and interpretation of toxicological data. In many cases, our work has compelled researchers and regulators to re-evaluate their analyses, conduct additional studies, or allow practical permit limits.



Probabilistic Analysis and Microexposure Event Modelling

Probabilistic analyses use the same exposure paradigms as deterministic analyses, but conserves uncertainty in order to allow the evaluation of the prediction's precision. Micro-exposure event modelling further refines the analysis by profiling the lifecycle of the receptor and factoring in changes throughout the exposure period thereby developing more realistic population-based estimates. Our scientists have also expanded the model to consider pharmacokinetic and dose information. Since SiS scientists helped pioneer these approaches, we know when to use them to your advantage.

Litigation Support

In litigation, a successful defence requires sound advice and the power of a credible witness. SiS provides you with both. Because we understand the science, methodologies, and regulations, our risk assessors have successfully defended their assessments on behalf of our clients in numerous administrative and judicial settings.