

Towards a modern exposure intelligence strategy

Why An Effective Modern Exposure Intelligence Strategy is needed

- The new REACH regulatory regime for chemicals in Europe will be heavily dependent upon intelligence, surrogate or otherwise, that can be used to model exposure scenarios for thousands of chemicals. Exposure scenarios form an essential basis for manufacturers and importers risk assessment. Also, downstream users do not have exposure data and there are not the resources to generate it.
- Assessment reports to show that chemicals can be used safely. This requires a tiered exposure assessment approach, the first tier being a conservative system, eg EASE. Where there is concern subsequent tiers will be used to provide more refined exposure modelling of scenarios. Individual case-by-case assessment using real data would be very expensive. Therefore a model is needed.
- Intelligence to aid identification of appropriate successors to the current DRP
- Data for setting realistic, adequately protective limits and standards against substances hazardous to health
- Identification of new or changing risks to health or volumes of activities
- Horizon scanning. Identification of new, emerging risks through changes in chemicals or processes used, changes in process and control measures, changes in volume or scale of risk.
- To provide evidence of whether or not exposures are controlled by application of COSHH/COSHH Essentials. Likelihood that what is thought to be, at a given time, process A with control package B, half a generation later there is less certainty that we are talking about the same or equivalent processes and control packages
- Collecting surrogates for inhalation, dermal and biological monitoring data
- Collecting contextual information on substances, tasks and control measures
- Through decline in exposure measurement Occupational Hygienists will be increasingly unable to correlate industrial scenarios with exposure concentrations, (cerebral expert systems) and furthermore there may be further divergence, and consequently drift over time, in the identification of processes and characterisation of risk management packages. Practitioners will be increasingly unable to make reliable judgements about what is in control, and what is not, but will nevertheless be unlikely to have recourse to exposure measurement to aid their judgements. Ostensibly similar processes and control package combinations may result in vastly different exposure concentrations
- Up to date view on exposure scenarios in UK
- Ability to answer questions on the UK chemical use and exposure situation.