



Defined Approaches in the GHS: Skin Sensitization

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Presenter biography

Joanna Matheson is a toxicologist at CPSC, a federal agency charged with protecting the public from unreasonable risks of serious injury or death from consumer products. She received her doctorate in Environmental Medicine at New York University and was a post-doctoral fellow at the National Institute for Occupational Safety and Health. Her research focused on the role of immune and inflammatory mediators in occupationally-induced diseases. She joined CPSC in 2003 and performs risk assessments relating to exposure from consumer products. She is the nanotechnology program manager for CPSC and is the agency liaison to the Federal Liaison Group on Asthma, the President's Task Force on Children – Healthy Homes and Asthma Disparities working groups, federal interagency committees on the OECD, GHS and NNI, and is chair of ICCVAM's Skin Sensitization Expert Group.



Presentation abstract

In 2015, the Netherlands and the United Kingdom submitted a working paper that proposes assessing the incorporation of non-animal testing methods into the GHS. With international efforts to replace animal testing with alternative approaches, the U.S. supported moving forward with discussion and work, recommending a measured and focused approach. The terms of reference given to the working group set out five main activities including identifying and evaluating available *in vitro* and *in chemico* test methods, validated at the international level, and existing guidance on *in silico* methods, including grouping approaches, quantitative structure activity relationship (QSARs) and read-across, that could be useful for GHS hazard classification. Rev9 incorporates the updates to Chapter 3.2 (Skin Corrosion/Irritation). The updates to Chapter 3.3 (Serious Eye Damage/Eye Irritation) will appear in Rev10, including the introduction of Defined Approaches, which, at that time, were under discussion at the OECD level for international adoption. This presentation will discuss the ongoing work in incorporating Defined Approaches (DAs) for skin sensitization hazard classification in Chapter 3.4. DAs for skin sensitization have been well developed, some accepted by regulatory agencies, and three are proposed for use in a tiered approach in the GHS. Additional defined approaches have been proposed for skin sensitization, but no classification criteria have yet been agreed internationally.