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### HEALTH EFFECT ASSESSMENT OF CHEMICAL SUBSTANCES IN TATTOO INK

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**Aim:** In relation to tattooing, the health effect assessment is an assessment of whether a given chemical substance deposited in the skin is associated with a health risk. The aim was to evaluate whether specific chemical substances identified in tattoo inks on the Danish market pose a health risk for tattooed individuals.

**Methods:** Twenty-one chemical substances / substance groups identified in tattoo inks on the Danish market were selected for the health effect assessment. The health effect assessment consists of a hazard assessment, an exposure assessment and a risk characterization. The hazard assessment included an identification of the critical effect(s) in relation to tattooing and establishment of a 'No-Observed-Adverse-Effect-Level (NOAEL) for the critical effect(s). In the risk characterization, the exposure estimate is compared with the NOAEL for the critical effect(s).

**Results:** Limitations as well as lack of knowledge in relation to the exposure assessment for the selected chemical substances / substance groups, as well as in relation to the hazard assessment for a number of the selected substances, implied that a valid risk characterization could not be performed.

**Conclusions:** Based on the current knowledge, it could not be evaluated whether the selected chemical substances identified in tattoo inks on the Danish market would pose a health risk for tattooed individuals.