



Statement on the Bulb Fiction film

In our function as Chair of the European Commission Scientific Committee on Health and Environmental Risks (SCHER) and rapporteur for the SCHER opinions on the safety of mercury in certain energy saving lamps¹, the Health and Consumers Directorate General of the European Commission has solicited our views on the contents of a film produced in Austria with the title 'Bulb Fiction' depicting adverse health effects due to exposure to mercury after breakage of energy saving lamps which contain mercury. More specifically, we have been asked to evaluate and comment on evidence in the film showing a boy experiencing hair loss following exposure to mercury from accidentally broken energy saving lamps, and the suggestion that the combined effects from exposure to mercury and lead may make people more susceptible to chemical stressors.

We have carefully reviewed the film contents, searched the available literature and consulted with colleagues in Austria and our views are as follows.

Hair loss following acute exposure to mercury has not been reported in the toxicological and/or the human epidemiology scientific literature even when persons were exposed to relatively high levels of mercury in the work place or from accidental intoxications, broken thermometers or spills). As indicated in the SCHER opinions on mercury in certain energy saving lamps, the content of mercury in those lamps is very low and adverse health effects from exposure to mercury after accidental breakage of the lamps are not expected. Hence, on that basis and without information on the medical history of the boy depicted in the film (e.g. levels of mercury in the blood are essential to confirm mercury poisoning, other confounding pre-existing medical conditions) we cannot endorse the view that the observed hair loss is due to exposure to mercury contained in certain energy saving lamps.

Concerning the combined effects of mercury and lead, there is no scientific basis for the claims made in the film as the two metals exert their toxicity to different target systems in the human body and effects of mercury on DNA-repair have been not reported at the concentrations which can be expected from exposures from broken energy saving lamps.

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¹ Scientific Committee on Health and Environmental Risks [Opinion on mercury in certain energy saving lamps](#), 18 May 2010

Scientific Committee on Health and Environmental Risks [Opinion on mercury in certain energy saving lamps – exposure to children](#), 22 March 2012