

Interpretation of hair results

On 5 February 2007, the laboratory has given the following results

Specimen : 6 hair fibers of an unknown subject

Received : on 16 January 2007

Request : metals

Method : ICP/MS

Among 32 elements

- chromium : 1.38 ng/mg

- strontium : 115 ng/mg

Our normal values

- chromium : 0.17 - 0.55 ng/mg

- strontium : 0.6 - 14.4 ng/mg

Goullé' normal values (Forensic Sci Int, 2005, 153, 39)

- chromium : 0.11 - 0.52 ng/mg

- strontium : 0.17 - 4.63 ng/mg

These concentrations demonstrate exposure to chromium and strontium, and can be considered as representative of chronic intoxication.

For example, workers in a tannery (exposed to chromium) have a median hair chromium concentration of 0.55 ng/mg (Br J Ind Med, 1989, 46, 171)

Given the health hazard of these elements, appropriate monitoring must be achieved, including general evaluation and biological exploration (blood and hair).

It seems urgent to control by appropriate investigations our preliminary findings.

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