A Section 508–conformant HTML version of this article
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Erratum: "A Novel Method for the Development of Environmental Public Health Indicators and Benchmark Dose Estimation Using a Health-Based Endpoint for Chlorpyrifos"

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The estimated exposure thresholds for RBC acetylcholinesterase (AChE) inhibition and plasma butyrylcholinesterase (BuChE) inhibition were listed incorrectly in the Results as "99% available RBC AChE, and 90% available plasma BuChE." The correct values are 99.98% for available RBC AChE and 96.25% for available plasma BuChE.

In addition, the RBC AChE level associated with a 15% cognitive deficit, based on data from Farahat et al. (2003), was derived incorrectly as $BM_{\mathrm{RBC–AChE}} = (100-80)/100 = 0.20$. The correct value is $BM_{\mathrm{RBC–AChE}} = (100-80)/80 = 0.25$. The estimate shown in the original Figure 5 for the level of BM_{AChE} associated with a 15% cognitive deficit in Farahat et al. (2003) also was incorrect. The corrected figure is included in this erratum.

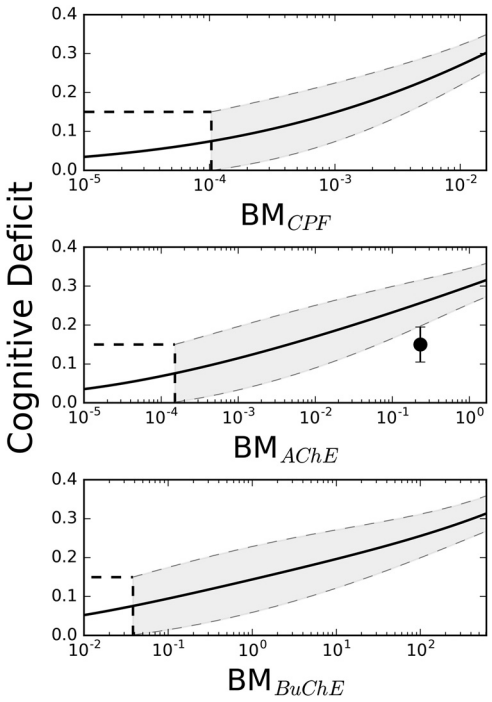

Figure 5. Predictions of human-specific cognitive deficits from measurable biomarkers of exposure. BM_{CPF},BM_{AChE}, and $\mathrm{BM}_{\mathrm{BuChE}}$, are the independent biomarker of exposure variables for Equation 2 and correspond to peak plasma chlorpyrifos (CPF) concentration, minimum blood acetylcholinesterase (AChE) inhibition and minimum blood butyrylcholinesterase (BuChE) inhibition, respectively. Dashed lines represent 95% prediction intervals, and the solid circle (•) represents measured fractional cognitive deficit data from Farahat et al. (2003) using the differences in performance of the Benton Visual Retention Test between the exposed and unexposed groups and fractional plasma AChE activity from the reported plasma AChE activity.

The authors confirm that these changes do not affect the study conclusions.

The authors regret these errors.

Reference

Farahat TM, Abdelrasoul GM, Amr MM, Shebl MM, Farahat FM, Anger WK. 2003. Neurobehavioural effects among workers occupationally exposed to organophosphorous pesticides. Occup Environ Med 60(4):279–286, PMID: 12660376, https://doi.org/10.1136/oem.60.4.279.