



## Dermal uptake of phthalates from clothing: Comparison of model to human participant results

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**CORRIGENDUM**

In Morrison et al. (2017)<sup>1</sup>, the following errors were published:

In Figure 2b, the partition coefficient of DnBP in cotton clothing was erroneously published as  $K_{cl_g} = 2 \times 10^6$  instead of  $4 \times 10^6$ . The discussion in the published article is correct and refers to the corrected version of Figure 2 below.

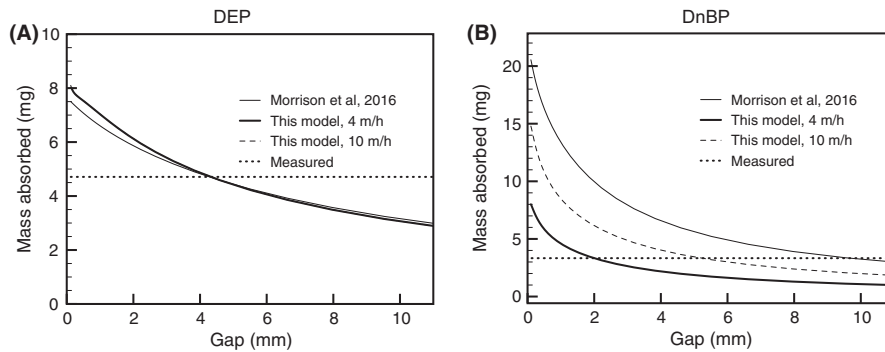


FIGURE 2 (corrected)

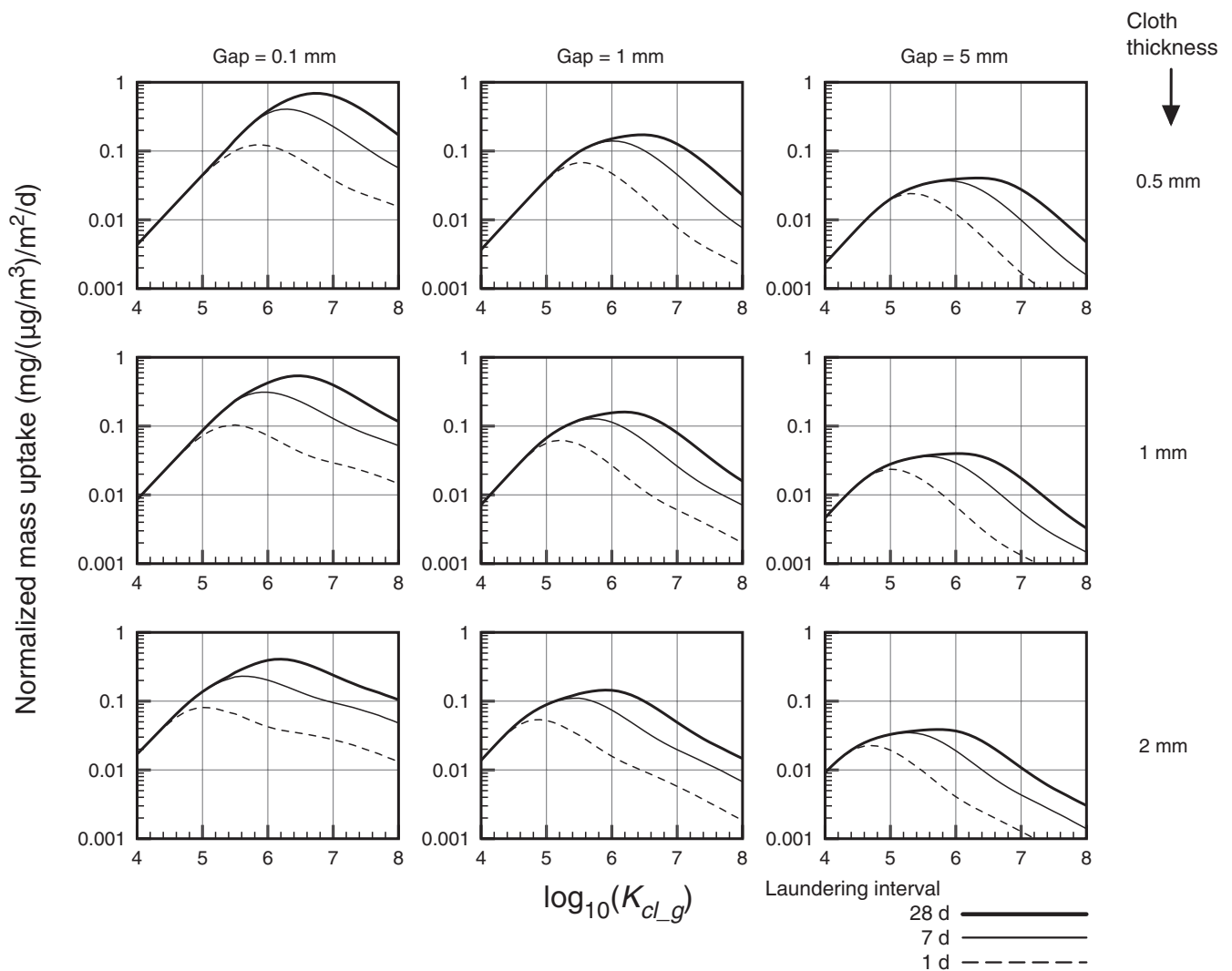


FIGURE 4 (corrected)

Further evaluation of the model simulations used to generate Figure 4 revealed two issues. The first was that a conversion had inadvertently been added to the code, increasing the normalized mass uptake predictions by approximately a factor of 3. The second was related to code convergence. The original code converged well for higher values of the partition coefficient. However, for simulations at a low value of the partition coefficient, the code had not properly converged, resulting in artificially high uptake values. Taken together, the simulation results shown in the original Figure 4 are too high. The corrected version of Figure 4 is reproduced here.

Manabu Shiraiwa and Pascale Lakey at University of California, Irvine, independently simulated this system with a different numerical method, and their results are consistent with our new values. Because the updated results are lower than the original results, three sentences in the discussion that address results presented in Figure 4 must also be corrected, as follows:

*Original sentences (page 648) [Corrections]*

- The normalized dermal uptake factor from Figure 4 is  $0.22 \text{ mg}/(\mu\text{g}/\text{m}^3)/\text{m}^2/\text{d}$  for 1-mm thick fabric, a 1 mm gap, and 7-day launder-wear interval. [*Change 0.22 to 0.08*]
- For an individual wearing clothes covering  $1.5 \text{ m}^2$  of skin area, the daily uptake due to gas-phase BaP accumulation on clothing and subsequent transfer to skin is estimated to be  $0.5 \text{ ng}/\text{d}$ . [*Change 0.5 to 0.2*]
- Therefore, dermal uptake from clothing is similar to that by inhalation. [*Change "similar to that" to "about 25% of uptake"*]

The code used to generate Figure 4 was different from code used in the rest of the manuscript; we have verified that all other results are correct.

## REFERENCE

1. Morrison GC, Weschler CJ, Bekö G. Dermal uptake of phthalates from clothing: Comparison of model to human participant results. *Indoor Air*. 2017;27:642-649.