Supplementary Information 2

In the simulation part with categorical exposure, we calculated the bias for each of $\beta_1$, $\beta_2$, $\beta_3$, and $\beta_4$ separately. We also calculated the root mean squared error defined as in the main text.

(I) $\beta_1$

(a) Berkson error adjusted

(b) GM

(II) $\beta_2$

(a) Berkson error adjusted

(b) GM
(a) Berkson error adjusted

(III) $\beta_3$

(IV) $\beta_4$

(c) MGM

(d) AM

(c) MGM

(d) AM
Figure SI1: Bias in estimates of (I) \( \beta_1 \), (II) \( \beta_2 \), (III) \( \beta_3 \), and (IV) \( \beta_1 \) via (a) Berkson error adjustment, (b) GM, (c) MGM, and (d) AM.
Figure SI2: Root mean squared error of estimates of the log odds ratios using the five approaches: GM=geometric mean; AM=arithmetic mean; MGM=log-normal mean exposure; true exposure; and Berkson error adjustment.