Supporting Information

Title: Transport and Mitigation of Exhaled Electronic Cigarette Aerosols in a Multizone Indoor Environment

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S1. AER Calculation using CO\textsubscript{2} Tracer Gas Decay Method

AER was calculated by the CO\textsubscript{2} decay method using the TSI Q-Trak. In aerosol laboratory rooms where the average CO\textsubscript{2} levels were below 400 ppm, CO\textsubscript{2} gas was injected into the room (using dry ice) until indoor concentration reached ~2000 ppm. The fan was turned on to create a well-mixed condition. Then CO\textsubscript{2} decayed to background level (~400 ppm). The outdoor CO\textsubscript{2} was measured by another TSI Q-Trak at the same time and the average was used in AER calculation. The equation used to calculate AER ($\lambda$) was:

\[-\ln\left(\frac{C_t - C_{out}}{C_0 - C_{out}}\right) = \lambda t\]  

(1)

where $C_t$ = CO\textsubscript{2} concentration as a function of time; $C_{out}$ = outdoor CO\textsubscript{2} concentration; $C_0$ = initial CO\textsubscript{2} concentration; $\lambda$ = AER (hr\textsuperscript{-1}); and $t$ = time (hr).
S2. Results from Nano Water-based Condensation Particle Counter (N-WCPC) and DiSCmini collocation tests

Figure S1. Collocation of Nano Water-based Condensation (N-WCPC) with (a) DiSCmini A and (b) DiSCmini B. Dotted lines represent 95% confidence intervals.
S3. Results from DustTrak II collocation tests

Figure S2. Collocation of DustTrak II B with DustTrak II A. Dotted lines represent 95% confidence intervals.

\[ y = 0.98x \]
\[ R^2 = 0.99 \]
\[ p < 0.001 \]