Supplemental Materials

Firefighters' absorption of PAHs and VOCs during controlled residential fires by job assignment and fire attack tactic

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Tables

Table S1 Spearman correlation coefficients[a] between PAH metabolites measured by ELISA and specific OH-PAH metabolites measured by HPLC-MS-MS for the selected job assignments.

Collection period	n	1-NAP	2-NAP	1-PHE	2,3-PHE	1-PYR	2-FLU	3-FLU
Pre-exposure	96	**0.39**	0.18	**0.36**	**0.36**	**0.27**	**0.41**	**0.41**
3-hr post-exposure	96	**0.39**	**0.31**	**0.49**	**0.49**	**0.53**	**0.49**	**0.46**
6-hr post-exposure	24	0.37	0.24	**0.42**	0.30	0.35	0.06	0.14
12-hr post-exposure	24	0.28	0.22	0.17	0.10	0.15	0.21	0.23

[a] Bolded values are statistically significant at $p < 0.05$.

Table S2 Median pre- to post-firefighting percent change[a] in exhaled breath concentrations of VOCs by job assignment

Job assignment	Benzene	Toluene	Ethyl benzene	Styrene	Xylenes
Attack / Search	**105%**	7.8%	**-25%**	4.6%	**-32%**
Outside vent	**40%**	-2.5%	-19%	14%	-12%
Command / Pump	33%	-14%	-27%	-18%	-22%
Overhaul	**28%**	-6.4%	-10%	0.5%	-3.5%

[a] Bolded values are statistically significant at $p < 0.05$.

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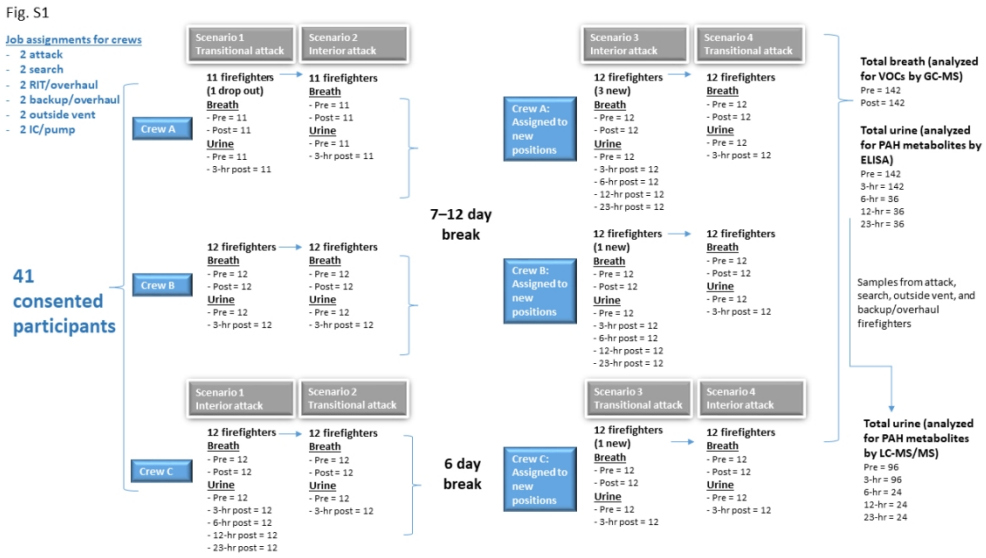
Figure Legends

Fig. S1 Study design flow chart showing how participants were distributed and assigned for each of the 4 fire scenarios and the timing, collection, and analysis of biological samples.



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