

## **Modeling the IAQ Impact of HHI Interventions in Inner-city Housing**

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The objectives of this project are to develop a multizone airflow and IAQ model of one or more urban houses using the CONTAM IAQ simulation program and to use these models to analyze the impact of various housing repairs/remediations. The house models will be validated against measurements made in the field, then the models will be used to analyze the impact of the repairs/remediations on housing-based hazards, such as inadequate ventilation, moisture, radon and other soil gases, particulates, environmental tobacco smoke, combustion byproducts (including carbon monoxide), and indoor air pollutants associated with other indoor and outdoor sources. The objective of these analyses will be to develop a detailed, technical understanding of the impacts of the interventions to refine their application in other buildings. Additionally, the exposure models available in CONTAM can be used to evaluate the interventions specifically for impact on the exposure of children to housing-based hazards.