FIRE AND BURN RISKS TO CHILDREN: EXPLORING THE ROLE OF HOUSING QUALITY

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Background The increased risk to low income, urban children from fire and burn injuries is well documented. However, little is known about how housing quality affects young children’s injury risk, even though the majority of their injuries occur in and around the home in the US and globally.

Aims To describe the frequency and characteristics of substandard housing in homes with young children; and to examine the association between substandard housing and the presence of working smoke alarms and safe hot water temperatures.

Methods In-home observations were made in 246 homes in low income urban neighbourhoods in Baltimore, MD using 46 items from the US Housing and Urban Development’s Housing Quality Standards form.

Results Virtually all homes (99%) failed the housing quality measure. Items with the highest failure rates were those related to heating and cooling systems; wall, ceiling and floor conditions; and sanitation and safety issues. Only 42% of the homes had a working smoke alarm on every level of the home; 62% had safe hot water temperatures. Logistic regression analyses found that the odds of having a working smoke alarm on every level increased by 18% and the odds of having safe hot water temperatures by 8% for every one item increase in the number of housing quality items passed.

Significance These results demonstrate that many low-income children may be at heightened risk for fire and scald burns simply by virtue of living in poor quality housing. Stronger collaboration between housing and injury prevention professionals is urgently needed.

ABSTRACTS