Malaria and the built environment

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Where we live..................
Humans build houses for cover and places to raise young. Other animals may build nests or burrows for protection or cover. Still others take cover where they find it, under trees or in a large herd. But for all animals (including humans),

**home is much bigger than a house.**

It’s the entire neighborhood where an animal gets the food, water and cover it needs to survive. Scientists call this home or place its **habitat.**
The most efficient malaria vectors and parasites that infect humans have evolved to target human at our most vulnerable: at night while we are asleep inside our homes. The home, normally viewed as a place of relative safety, becomes a place where the risk of malaria is high. Once the link between malaria and mosquitoes was discovered, screening homes to reduce malaria was tested and implemented. Improved housing contributed largely to the elimination of malaria in the USA and to its decline in Europe. A review of the more recent literature presents strong evidence that ‘good housing’ is protective in many tropical countries.
To have long-term impact on global health, interventions that combine health and housing are essential. Addressing the issue of adequate housing and healthy communities together is key in any successful health-focused strategy.
There is an urgent need to develop supplementary interventions that are not reliant on current insecticides. This view is voiced in the policy document entitled ‘Multisectoral action framework for malaria’.

The need for ‘good’ housing to reduce malaria is echoed throughout the document.

There are also programmatic issues of how these housing interventions could be replicated, scaled-up and sustained.
Way Forward:

- What is the degree of protection against clinical malaria afforded by ‘good quality’ housing and the reduction of larval habitats in the peridomestic environment? ’
- Will ‘good quality’ housing be equally protective everywhere?
- What architectural features are protective?
- Could these features be improved further?
- Do people understand the relationship between housing improvements and malaria reduction?
- How do local people finance housing improvements/modifications?
- How best to influence housing interventions that will reduce the risk of malaria and other vector borne diseases?
- Do effective interventions exist that can utilize local materials and labour.
- Non-traditional key stakeholders at the table?
BUILD Malaria Out!

“Malaria control programs should consider targeted housing improvements as a sustainable additional intervention to reduce transmission”