4th Housing & Malaria Work Stream meeting
Co-leaders: Steve Lindsay & Lucy Tusting

Wednesday 8 February 2017
Room Dassault/Morane
10:30 – 13:30
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>10.30 – 10.35</td>
<td>Welcome</td>
<td>Steve Lindsay &amp; Lucy Tusting</td>
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<tr>
<td>10.50 – 11.10</td>
<td>Policy update Work in progress on housing &amp; malaria proposal</td>
<td>Steve Lindsay</td>
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<td>11.10 – 11.20</td>
<td>Housing improvements in Namibia</td>
<td>Tara Seethaler (CHAI)</td>
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<td>11.20 – 12.30</td>
<td>Discussion: How do we engage with the housing sector?</td>
<td>All (led by Steve Lindsay)</td>
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<tr>
<td>12.30 – 13.30</td>
<td>Discussion: Work Plan 2017-2018 Advocacy, GVCR &amp; AOB</td>
<td>All (led by Lucy Tusting)</td>
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<td>13:30</td>
<td>End of meeting</td>
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Review of Work Plan 2016-2017
Lucy Tusting
2016-2017 Work Plan

1. **Advocacy** for inclusion of housing in strategic plans, curricula, CSR

2. **What housing interventions do we recommend** – update 2015 consensus statement

3. **Visit key funders** to present ideas on malaria and housing

4. **6 monthly updates** on what’s happening in housing and malaria

5. **Stakeholder visits** to study sites in Tanzania and The Gambia

6. **Explore links with UNEP & other organisations**
2016-2017 Work Plan

1. Advocacy for inclusion of housing in strategic plans, curricula, CSR

➢ Global Vector Control Response 2017-2030 emphasizes role of housing for vector control – Due for presentation to the WHA May 2017

➢ Proposal to UK BBSRC to establish a network on housing & VBDs – Round 1 successful; full application due 16th Feb

➢ Habitat 3 presentation & blog on housing & VBDs; VBD included in New Urban Agenda

➢ Networking & informal discussions – ongoing, e.g. discussion of future research held at ASTMH 2016
2016-2017 Work Plan

2. **What housing interventions do we recommend** – update 2015 consensus statement
   - Not done – Discuss at VCWG 2017

3. **Visit key funders** to present ideas on malaria and housing
   - **DfID** – advocated for future funding for research on housing & VBDs in online consultation, Oct 2016
   - **IVL, a Bill Gates Company** – Visit to Seattle in December 2016 to discuss development of house screening products
2016-2017 Work Plan

4. **Six monthly updates** on what’s happening in housing and malaria

5. **Stakeholder visits** to study sites in Tanzania and The Gambia
   - RooPfs study, The Gambia – June 2016 meeting attended by officials from NMCP and housing sectors
   - Magoda project, Tanzania – 2017?

6. **Explore links with UNEP & other organisations**
   - 2016 New Urban Agenda included VBD (Graham Alabaster)
Work in Progress

Lucy Tusting & Steve Lindsay
Work in Progress

1. Multi-country analysis of housing & malaria
2. Roo*Pfs study in The Gambia
3. Eave-tube study in Côte d’Ivoire
4. Importance of cross-ventilation
5. Relevant policy issues
Roo*Pfs* study design

800 houses traditional mud-walled thatched houses recruited

400 traditional mud-walled thatched houses

400 ventilated metal-roofed houses
RooPfs house: Ventilated roof
Roo\textsuperscript{Pf}s house: Ventilated front door
Eave tubes study update

cross reference to the talk of Matt Thomas in the New Challenges, New Tools in Vector Control work stream where he gave an update on the Eave tube trial
Effects of cross-ventilation on mosquito behaviour
Jim Sutcliffe, Trent University, CDC Entomology Branch

Cross-ventilation makes bed nets more comfortable to use but... how does it affect mosquito behaviour and does it matter?

Used video to see where mosquitoes attack an occupied net in still air and with 0.1 and 0.4 m/s cross-drafts from a small fan

Av. appearances/min
(# video frames with mosquitoes)

- Cross-ventilation may cause mosqs to attack sides where most holes occur, to move away from areas with special treatments or it may work against other measures such as eave tubes
- Such unintended and unforeseen consequences illustrate the need to build investigations of mosquito behaviour into all intervention planning
Global Vector Control Response

Reduce the burden and threat of vector-borne diseases that affect humans

Effective locally adapted sustainable vector control

**Pillars of action**

1. Strengthen inter- and intra-sectoral action and collaboration
2. Enhance vector surveillance and monitoring and evaluation of interventions
3. Scale up and integrate tools and approaches
4. Engage and mobilize communities

**Foundation**

A. Enhance vector control capacity and capability
B. Increase basic and applied research, and innovation

**Enabling factors**

- Country leadership
- Advocacy, resource mobilization and partner coordination
- Regulatory, policy and normative support

**Roll Back Malaria**
SDG11 & the New Urban Agenda
Housing improvements in Namibia - Tara Seethaler
Discussion Part 1:
How do we engage with the housing sector?

Steve Lindsay
Discussion Part 2: 
Next steps 2017-2018 

Lucy Tusting
Long-term vision

Goal
Sustainable & resilient communities free of VBDs

Objectives
Develop & scale up products & approaches in the built environment for reducing VBDs

Action
Information exchange | Advocacy | Basic & applied research | Pathways for scale-up

Foundation
Network of experts in vector-borne disease control & the built environment
Overarching question for discussion

Change from:
• Malaria and housing

To....
• Vector-borne diseases & the built environment
• With the primary focus on malaria and housing
Next steps for 2017-2018?

• Strengthen links with the housing sector

• Update housing and malaria recommendations
  • Link with Global Vector Control Response

• Encourage basic and applied research on vector-borne diseases & the built environment

• Information exchange (including news updates)
1. Development of strategic documents on inter-sectoral action for VBDs, including housing sector, WASH etc.
2. Donor funding to kick-start inter-sectoral meetings in countries
3. Look for co-benefits across sectors to advocate for ISA.
4. What epi evidence do we need before we recommend specific improvements for scale up? Approach at multiple levels in parallel: Get existing evidence to VCAG and clarify pathways. Money for advocacy/vocational training to get bottom up initiatives started.
Strengthen links with housing sector

1. Explore housing by-laws and social housing associations
2. Identify e.g. screening manufacturers, association?, importers, distributors and engage with them to advocate (Sean Blaufuss to look into this)
3. Link with training institutions in country, VBD control dept approaches formal institutions, also less formal route. Think about different strategies for rural (influencing local people) vs. urban (more structured, skills available, codes for building).
Update housing recommendations (2015 consensus statement)

1. Include mention of specifications e.g. robust screening and maintenance recommendations
2. How does it fit with existing VC interventions?
3. What improvements to recommend/need prioritised list, and when do we stop improving
4. More nuanced taking into account local situation (no blanket recommendation which will be acceptable/effective)

Taken care of by:
1. WHO Housing and Health Guidelines on housing (covers all sorts of hazards including all VBDs)
2. WHO guidelines on vector control interventions for malaria will include housing (backed by systematic review etc.)

WG to make advocacy document to encourage VBD programmes to include housing improvements into activities.

Produce also technical guidance on implementing improvements e.g. CHAI doc. Include specifications and maintenance recommendations.
Encourage research & innovation on VBDs and the built environment

Important research topics: air flow, pathways for scale up, sustainable/comfortable improvements, deflection of mosquitoes to houses without improvements?, coverage needed for mass effect,

Prioritising LLIN delivery to communities where needed. Not necessarily needed where housing improvements are already in place?

Partner with solar house companies to advocate for housing improvements alongside solar tech. Payment in instalments could make more affordable e.g. Kenya mobile phone company example (Alex)

Learn from Chagas work in Latin America – how have they engaged housing sector? (Martha to give names of folks).

How to capture local housing/living adaptations that we could scale up?
Information exchange

1. MalariaWorld
2. Matt Thomas
3. See what’s happening with Lake Victoria Initiative – on hold
4. Contacts with industry (Ole)
AOB