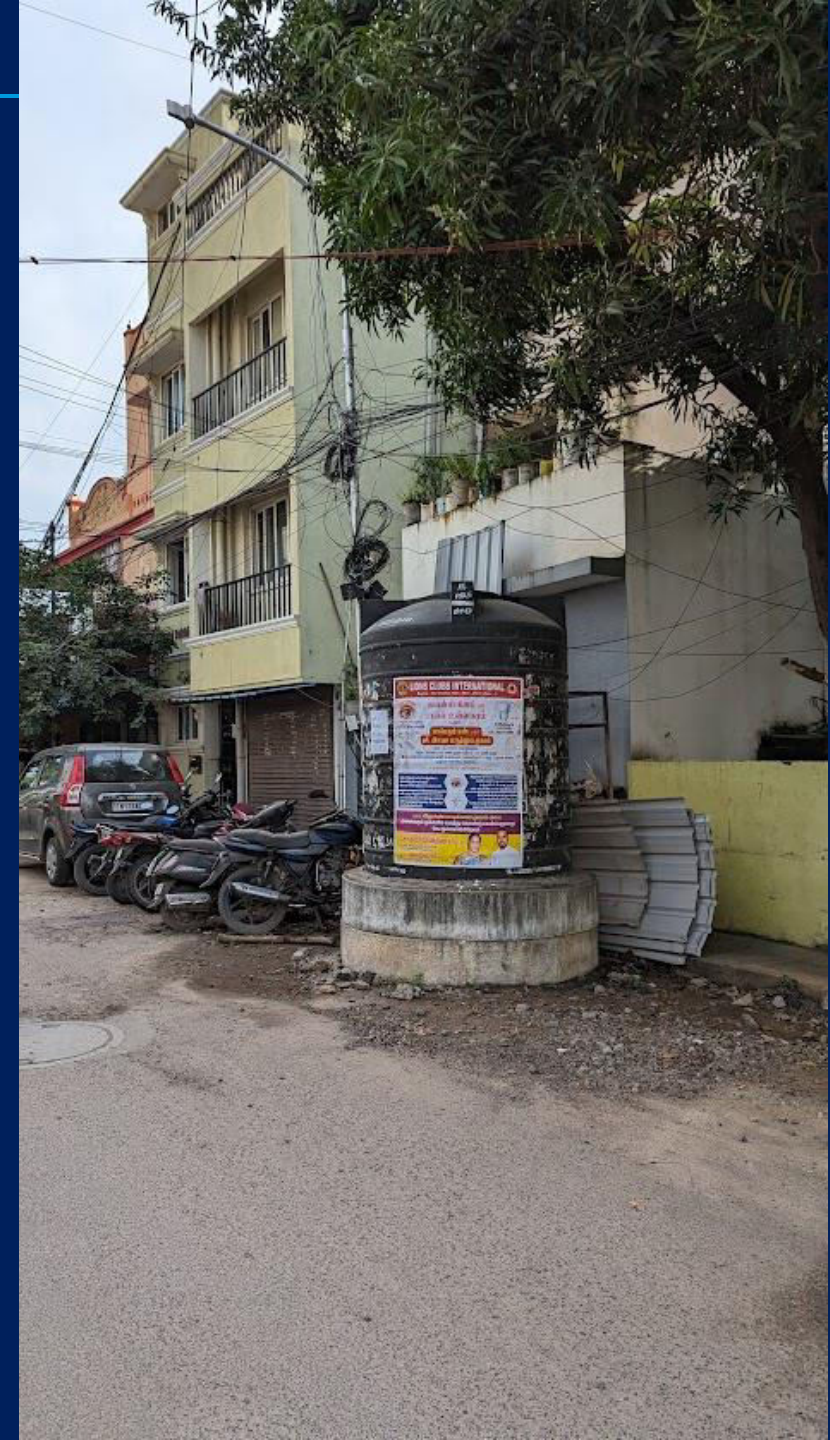


Building a broader approach to mosquito management across the built environment

Seth Irish



World Health
Organization



Focus on urban setting

Review of pertinent guidance

Broader approach

Focus on urban settings



Focus on urban settings

- Rural settings also have a built environment
 - Housing
 - Water management
 - Agricultural development
- Urban settings have a wider range of these environments, and a wider range of responses possible

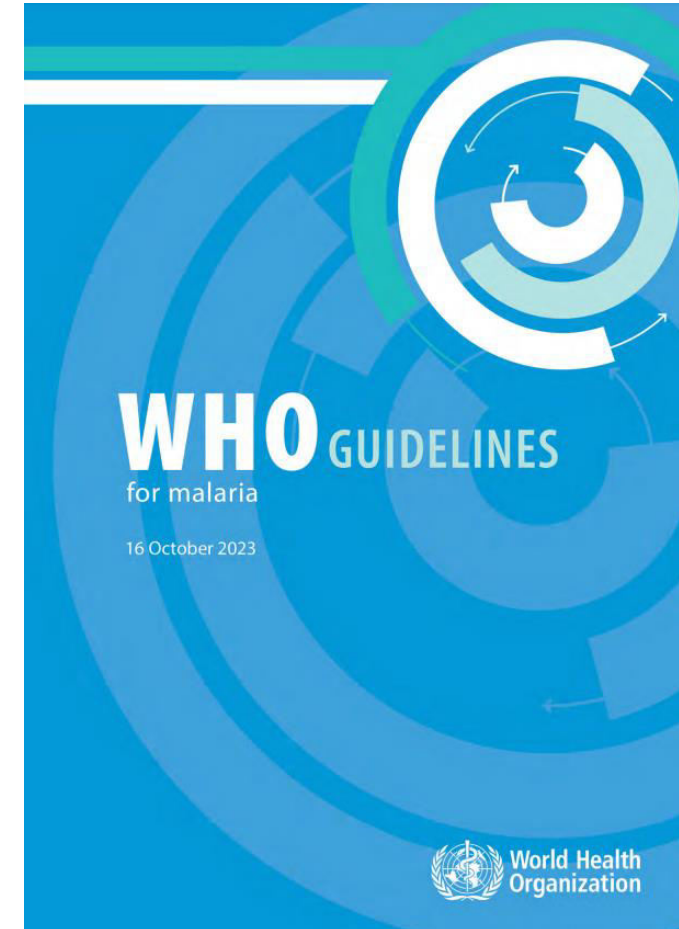


Review of pertinent guidance



Review of pertinent guidance

- In addition to IRS and ITNs, which can be conducted in urban settings, several recommendations are applicable to vector control in the built environment
 - House screening
 - Larval source management
 - Space spraying



House screening

Conditional recommendation for, Low certainty evidence

House screening (2021)

Screening of residential houses can be used for the prevention and control of malaria in children and adults in areas with ongoing malaria transmission.



Larval source management

- In the WHO guidelines, recommendations are divided into three sections:

Intervention	Recommendation
Larviciding	conditional recommendation for
Larval habitat modification and/or larval habitat manipulation	no recommendation
Larvivorous fish	no recommendation

Conditional recommendation for, Low certainty evidence

Larviciding (2019)

Insecticides can be regularly applied to water bodies (larviciding) for the prevention and control of malaria in children and adults as a supplementary intervention to ITNs or IRS in areas with ongoing malaria transmission where aquatic habitats are few, fixed and findable.



Space spraying

- Current recommendation is against space spraying due to lack of evidence against malaria

Conditional recommendation against, Very low certainty evidence

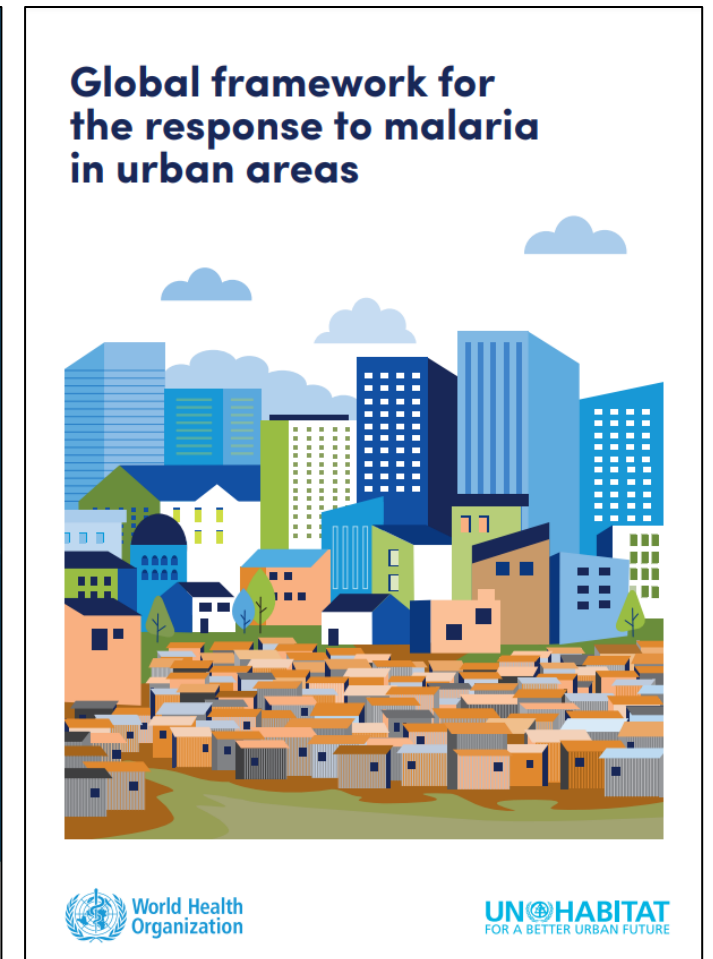
Space spraying (2019)

Space spraying is not recommended for the prevention and control of malaria in children and adults in areas with ongoing malaria transmission; IRS or ITNs should be prioritized instead.



Other guidance

- Important to take other diseases into account when planning a response
- Community engagement is essential
- Surveillance is important and may be different in urban settings
- Capacity is essential
- Inter- and intra-sectoral action

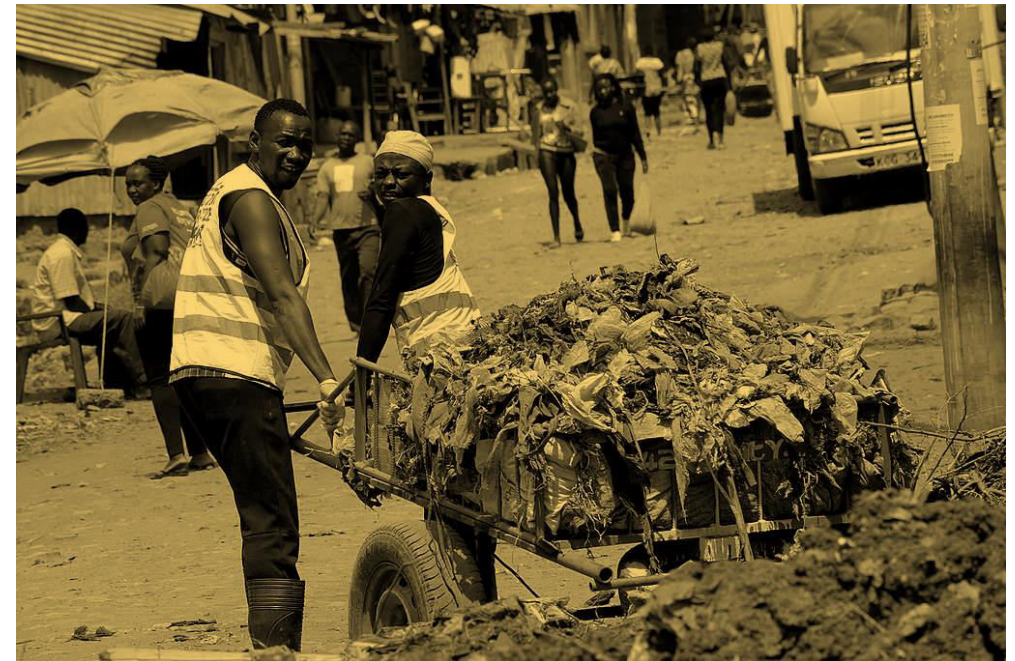


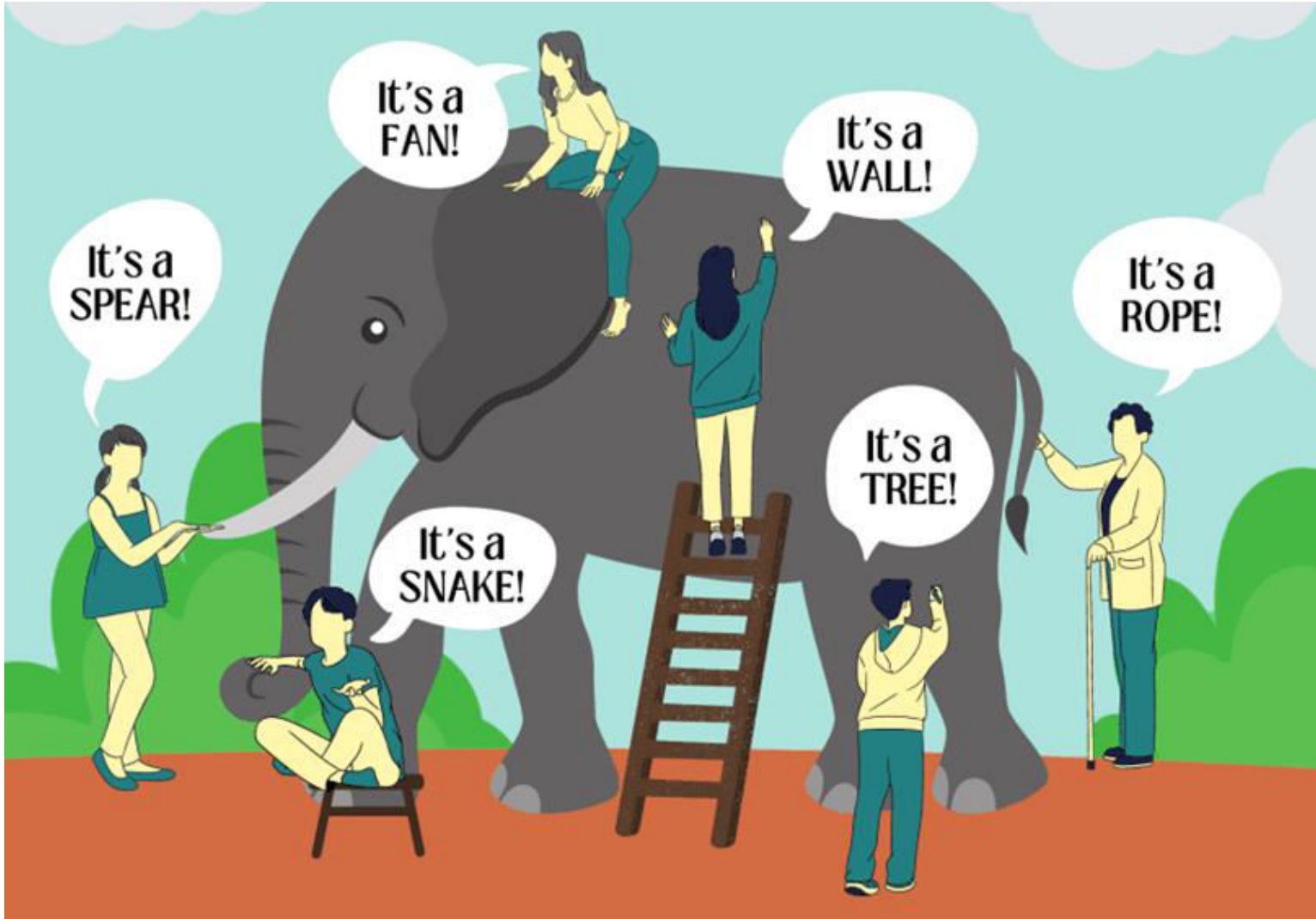
Broader approach



Need for a broader approach

- Many of the features that contribute to malaria transmission in the built environment are not routinely managed or influenced by the health sector
- Sanitation and environmental health offices for cities are usually based in city offices
- Road construction, drainage, and water supply is managed by public works offices or private companies.





Conclusion

- Built environments present in urban and rural areas
- WHO has guidelines related to some interventions that can be implemented in urban areas but important not to create conditions conducive to malaria transmission
- Essential to expand the role of malaria prevention beyond the health sector

Thank you

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