Nontuberculous mycobacterial diversity in the Hawai‘i environment; update

Collected 207 new environmental samples from 136 unique sites across four Hawaiian Islands –
• Kauai
• Oahu
• Maui
• Hawai‘i Island

**MAC was the most commonly recovered NTM from Hawai‘i environment.**

**Matched study**
• Determine whether the household environment is a source of infection and identify host factors and behaviors that may contribute to NTM acquisition.

• Patients with and without NTM were asked to sample from their homes:
  • Showerhead biofilms
  • Kitchen sink faucet biofilms
  • Tongue
  • Dust
  • soil.

**Household may be a potential route of exposure for NTM.**

<table>
<thead>
<tr>
<th>“Household” (n=58)</th>
<th>“Non-household” (n=61)</th>
<th>“Outdoor” (n=88)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Showerheads (35)</td>
<td>Public sink faucets (61)</td>
<td>Beach showerheads (44)</td>
</tr>
<tr>
<td>Kitchen sink faucets (23)</td>
<td></td>
<td>Stream-rock interface (11)</td>
</tr>
<tr>
<td></td>
<td>Ice machines (17)</td>
<td>Water fountains (9)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Garden hoses (7)</td>
</tr>
</tbody>
</table>

Ravleen Virdi, Honda Lab