Rat Lungworm Disease (RLWD)

Prepared By
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Overview:

Vectors: Invasive snails and slugs, crustaceans (prawns), frogs, rodents

Pathways to Humans:
1) Consuming undercooked vectors (small snails in produce)
2) Unwashed, fecal-contaminated produce or other food
3) Contaminated drinking water

Symptoms: Nausea, vomiting, neck stiffness, severe headaches, abnormal tingling

Risks: Eosinophilic meningitis, long-term neurologic dysfunction, death

Hosts: Primarily rodents (rats and mice), but also other mammals

Causing Organism: Larval stage of the nematode Angiostrongylus cantonensis

When symptoms begin: 1-3 weeks after infection

Length of symptoms: 2-8 weeks

Study of RLWD and Meningitis:

<table>
<thead>
<tr>
<th>Study length</th>
<th>50 months</th>
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</thead>
<tbody>
<tr>
<td>Duration</td>
<td>Jan 01-Feb 05</td>
</tr>
<tr>
<td># Eosinophilic Meningitis Cases</td>
<td>84</td>
</tr>
<tr>
<td># Attributed to RLWD</td>
<td>24</td>
</tr>
<tr>
<td>% of Total (# RLWD/# EM)</td>
<td>29%</td>
</tr>
</tbody>
</table>

Incidence in HI, 2007-2015:

<table>
<thead>
<tr>
<th>Location</th>
<th># Incidences</th>
<th>% Incidences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>42</td>
<td>100%</td>
</tr>
<tr>
<td>Hawaii Island</td>
<td>38</td>
<td>91%</td>
</tr>
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</table>

Citations:


