Malaria

Worldwide, malaria is one of the most devastating of the communicable diseases, causing perhaps 1–2 million deaths annually, in addition to an enormous burden of disability and medical costs. It is caused by parasites of the genus *Plasmodium* that are transmitted among humans by *Anopheles* mosquitoes. While transmission has not been documented in Oregon for decades, malaria is reported every year in our state; all cases have resulted from exposures outside the United States. *Anopheles* mosquitoes capable of transmitting malaria live in Oregon, so local transmission remains a theoretical possibility — albeit one we don’t lose much sleep over.

Eighteen cases of laboratory confirmed malaria were reported in Oregon in 2014. Ten (53%) were *Plasmodium falciparum* — the worst kind to have and the most common worldwide. Oregon surveillance data contribute to the national database, which tailors recommendations for prevention and treatment. Of the 18 Oregon cases reported in 2014, 15 (83%) reported pre-onset travel in Africa or were immigrants from Africa. One case had been in South America and two in Asia. Competent advice about behavioral and chemical interventions can reduce risk to travelers, but refugees and other immigrants may carry long-harbored infections.
Malaria by year: Oregon, 1988–2014

In incidence of malaria by age and sex: Oregon, 2005–2014
Incidence of malaria: Oregon vs. nationwide, 2000–2014

Malaria cases by continent of acquisition: Oregon, 2014

<table>
<thead>
<tr>
<th>Continent</th>
<th>Oregon</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Asia</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Central/South America</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>U.S.</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

6% Central/South America

83% Africa

11% Asia
Prevention

• Understanding the current situation with malaria in one’s travel destinations is essential. Consult with a travel medicine expert or — if nothing else — read the country-by-country assessment online from CDC (www.cdc.gov/malaria/travelers/country_table/a.html).

• Because *Anopheles* mosquitoes feed at night, minimize your risk of getting bitten by sleeping under an insecticide-impregnated mosquito net or in an air-conditioned room (or both!).

• If out and about at night, wear long-sleeved shirts and pants and use topical mosquito repellents.

• Chemoprophylaxis (antibiotic medicine) provides the backstop you need when bite prevention is imperfect — as it always is. Many effective medicines are available in the U.S. (www.cdc.gov/malaria/travelers/drugs.html), and even more elsewhere. Weighing their relative merits and side effects can be complex; consult a travel expert for individualized advice. Don’t wait until the last minute; most drugs should be started before and continued after the likely exposure period. See www.cdc.gov/malaria/travelers/drugs.html for a list.