Refugees from Europe are at risk for infection with soil-transmitted helminths and *Strongyloides stercoralis*. The following guidelines are intended to help RHAP clinicians to care for European refugees arriving from areas endemic for these infections.

**OVERSEAS (PRE-DEPARTURE) PRESumptive THERAPY OF Parasitic Infections**

As of February 2017, refugees coming from the European countries of processing do not receive any presumptive treatment for soil-transmitted helminths (*Ascaris lumbricoides* [Ascaris], whipworm [*Trichuris trichiura*], and hookworm [*Anclostoma duodenale* and *Necator americanus]*) or for *Strongyloides stercoralis*.

Check [here](#) for a full description of overseas presumptive therapy.

**Refugee Health Assessment Program (RHAP)**

**Intestinal and Tissue-Invasive Parasitic Infections:**

The RHAP protocol requires universal screening of *Giardia lamblia* antigen by direct immunofluorescent detection procedure of a single stool sample. Summary of management of other intestinal and tissue-invasive parasitic infections:

- **Symptomatic:** Microscopic examination of one single stool specimen for Ova & Parasites & serologic testing for invasive species as appropriate. Treat accordingly based on results. Refugees from this region are more likely to have non-parasitic etiologies of symptoms (with the exception of giardiasis).

- **Asymptomatic:**
  - **No Pre-Departure Treatment** due to departure from a location where a presumptive treatment program does not yet exist.
  - Microscopic examination of a single stool specimen for O&P:
    - **Positive O & P test without peripheral blood eosinophilia**\(^1\) (>400 cells/µL): Provide appropriate treatment. Otherwise follow-up for further evaluation.
    - **Positive O & P test with eosinophilia:** Provide appropriate treatment. Have follow-up to assess for persistence of eosinophilia and/or evaluation for other causes.
    - **Negative O & P test without eosinophilia:** No treatment or follow-up needed.

---

1 Peripheral blood eosinophilia could be also due to other helminthic parasites, other infections/infestations, allergies, autoimmune and related disorders, immunodeficiency states, neoplastic diseases or other conditions.
Summary of Management of Parasitic Infection by Refugee Population

Europe

- **Negative O & P test with eosinophilia:** Low likelihood of infectious etiology. Options for management include:
  - Treat for *Strongyloides stercoralis* with ivermectin or extended-course albendazole and have follow-up to assess resolution of eosinophilia, OR
  - Further evaluation as per targeted testing protocol (i.e., *Strongyloides* titers), treatment as appropriate, and consider non-infectious causes, OR
  - Referral to infectious disease specialist or primary care physician for further evaluation.

**Medications:**
- **Albendazole** (for treatment of soil-transmitted helminths) is indicated for individuals ≥ 12 months of age and older who are NOT pregnant and do NOT have neurocysticercosis (either confirmed cases or individuals with unexplained seizures or subcutaneous nodules suggestive of cysticercosis).

- **Ivermectin** (for treatment of *Strongyloides stercoralis*) is indicated for individuals ≥ 15 kg in weight and ≥ 90 cm in height who are not pregnant or lactating during the first week postpartum.

Full information on indications, dosing, and precautions for these medications can be found in Table 1 of the CDC’s summary of treatment of intestinal parasites in refugees.

**European Countries of Processing:**

<table>
<thead>
<tr>
<th>Processing Country</th>
<th>Refugee Country of Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria, Malta, Moldova, Russia &amp; Ukraine</td>
<td>Afghanistan, Moldova, Russia &amp; Ukraine</td>
</tr>
</tbody>
</table>

For more information visit [www.mass.gov/dph/refugee](http://www.mass.gov/dph/refugee)