

Intestinal Parasite Screening

Guidelines for Screening

General Guidelines for Adults and Children

Overseas guidelines and implementation of presumptive therapy will vary over time, depending on cost, availability of medications, implementation of administration strategies, and evolving epidemiology. Some refugees will receive no overseas treatment, others a single dose of albendazole and/or praziquantel, and still others, a comprehensive treatment for all nonprotozoal parasitic infections with ivermectin or high dose albendazole in combination with praziquantel (for sub-Saharan African refugees). Thus, screening guidelines must be implemented based on the individual refugee's point of departure for the United States ([Table 1](#)) and whether the refugee received pre-departure presumptive therapy.

Information on presumptive therapy received

All eligible refugees from the Middle East, South Asia, Southeast Asia and Africa are currently receiving a single dose of predeparture albendazole (as of June 2010). All sub-Saharan Africa refugees are currently receiving praziquantel presumptively prior to departure for schistosomiasis (began January, 2010). Records of presumptive treatment received by the refugee are currently available in the IOM or Blue and White bag carried by the refugee. The refugee should be directed to bring the IOM/blue and white bag to the clinic at the time of appointment. The provider may also check with the volunteer agency coordinating the refugee care if they have a copy of the records. In addition, records will be made available to State Refugee Health Coordinators through the Electronic Data Network (EDN) and through WRAPS. If documentation of treatment is not available it should be assumed the refugee did not receive presumptive therapy.

Screening for parasitic infection in asymptomatic refugees who had no pre-departure treatment

A refugee who received no overseas predeparture antiparasitic treatment should receive post-arrival intestinal parasite screening tests ([Figure 1](#)). This evaluation should include O&P examinations performed on separate morning stools by the concentration method. All potentially pathogenic parasites detected should be treated [Table 2](#). In addition, serological studies should be performed for strongyloides (all refugees) and for schistosomiasis (sub-Saharan African refugees). Alternatively, presumptive therapy for strongyloides and schistosomiasis, as described in the overseas guidance is acceptable ([hyperlink to overseas guidelines](#)). It should be noted that currently (June, 2010) all eligible sub-Saharan African refugees are receiving predeparture praziquantel therapy so serologies and/or post-arrival presumptive therapy is not needed.

An eosinophil count should be routinely performed as part of the domestic medical screening examination. An absolute eosinophil count of ≥ 400 cells/mL is considered elevated. If the refugee does not have an elevated eosinophil count, no further evaluation is needed. If a refugee has an elevated eosinophil count, and has a parasite infection that is known to cause eosinophilia ([Table 3](#)) identified in the stool O&P examination and/or by serology, appropriate therapy should be provided (for treatment recommendations, [see The 2004 Medical Letter on](#)

Intestinal Parasite Screening

Drugs and Therapeutics  [PDF - 12 pages] . The updated 2007 Medical Letter on Drugs and Therapeutics can be purchased at www.themedicalletter.org . If the refugee has an elevated eosinophil count they should have this re-checked in 3-6 months. If still elevated, further evaluation is warranted.

Screening for parasitic infection in asymptomatic refugees who received single dose pre-departure albendazole +/- pre-departure praziquantel

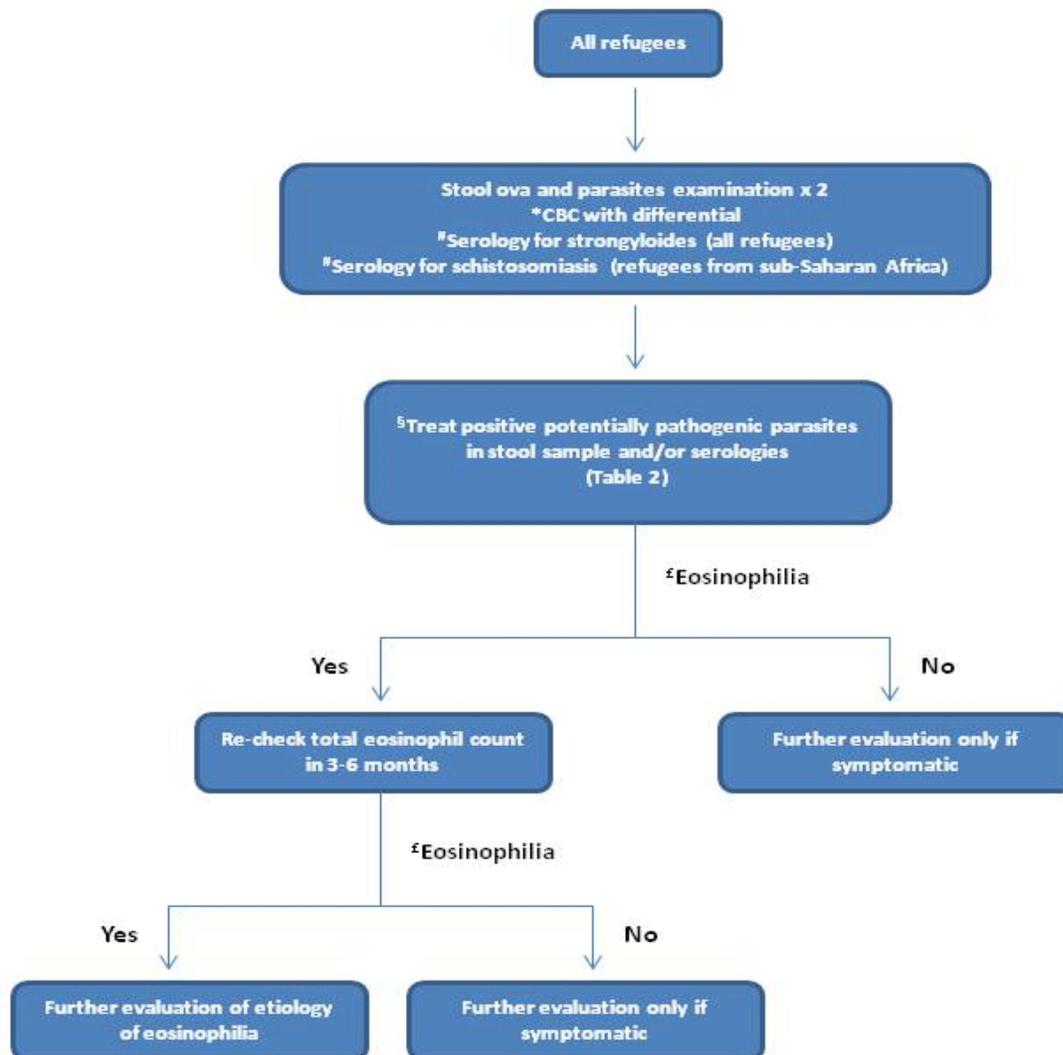
Refugees who received one dose of presumptive albendazole overseas, or one dose of albendazole plus treatment for schistosomiasis with praziquantel (sub-Saharan African refugees), should have an absolute eosinophil count as part of their hematologic profile during domestic routine screening and serological testing for strongyloides and schistosomiasis in sub-Saharan African refugees (if not previously treated with praziquantel) ([Figure 2](#)). An absolute eosinophil count exceeding 400 cells/mL is most likely a residual eosinophilia due to an already-treated parasitic infection (e.g., hookworm) or due to ongoing infection with strongyloides (all refugees) and/or schistosomiasis (sub-Saharan African refugees). An acceptable alternative to serologic testing is to presumptively treat refugees for strongyloides and/or schistosomiasis (if not previously done). Guidelines for presumptive therapy are the same as recommended for overseas treatment. For refugees with an elevated absolute eosinophil count a follow-up eosinophil count in 3-6 months is suggested. If elevated, further diagnostic evaluation is recommended.

Screening for parasitic infection in asymptomatic refugees who received high-dose pre-departure albendazole (7 days) OR ivermectin +/- praziquantel

Refugees who receive high-dose presumptive pre-departure albendazole or ivermectin plus praziquantel treatment (sub-Saharan African refugees) should have an absolute eosinophil count as part of their routine domestic hematologic profile ([Figure 3](#)). An absolute eosinophil count exceeding 400 cells/mL is most likely a residual eosinophilia due to an already-treated parasitic infection. It is reasonable to obtain stool O&P examinations on these individuals but is likely more cost-efficient to repeat an eosinophil count 3-6 months after arrival. If the repeat eosinophil count remains elevated further diagnostic evaluation is warranted.

Intestinal Parasite Screening

Figure 1. Screening of asymptomatic refugees for parasitic infection if they received no pre-departure treatment

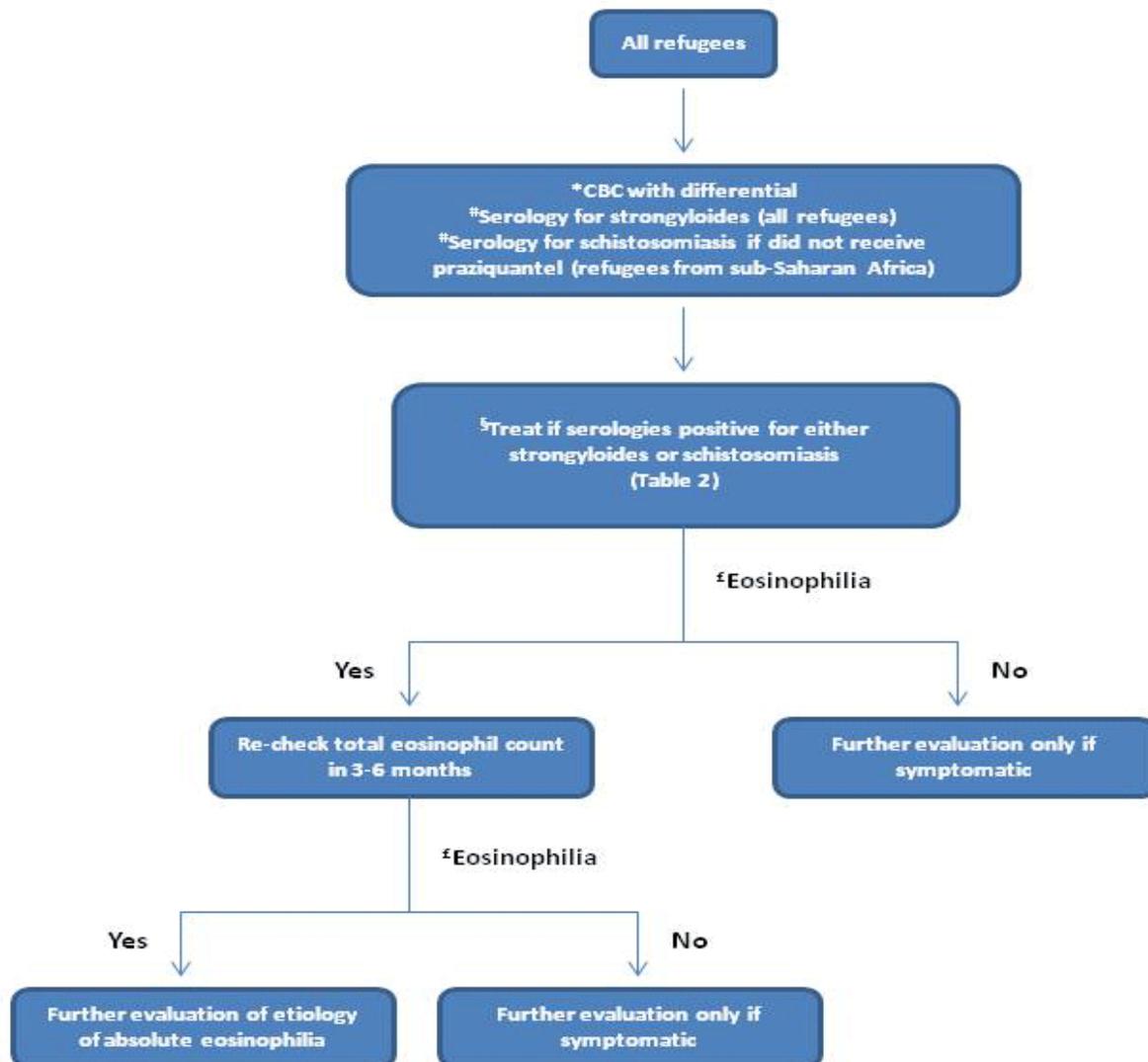


- *CBC Complete blood count and differential (this is routinely recommended for all arriving refugees as part of their general health screening)
- #Presumptive treatment is an acceptable alternative
- §See <http://medicalletter.org/hidden/parasitic2004.pdf>, the updated 2007 Medical Letter on Drugs and Therapeutics can be purchased at www.themedicalletter.org
- £Eosinophilia = an eosinophil count of >400 μ L

Commercial laboratories offer serology testing for schistosomiasis and strongyloidiasis. CDC performs reference testing only to confirm test results, which are occasionally difficult to interpret or equivocal.

Intestinal Parasite Screening

Figure 2. Screening of asymptomatic refugees for parasitic infection who received pre-departure single dose albendazole +/- praziquantel

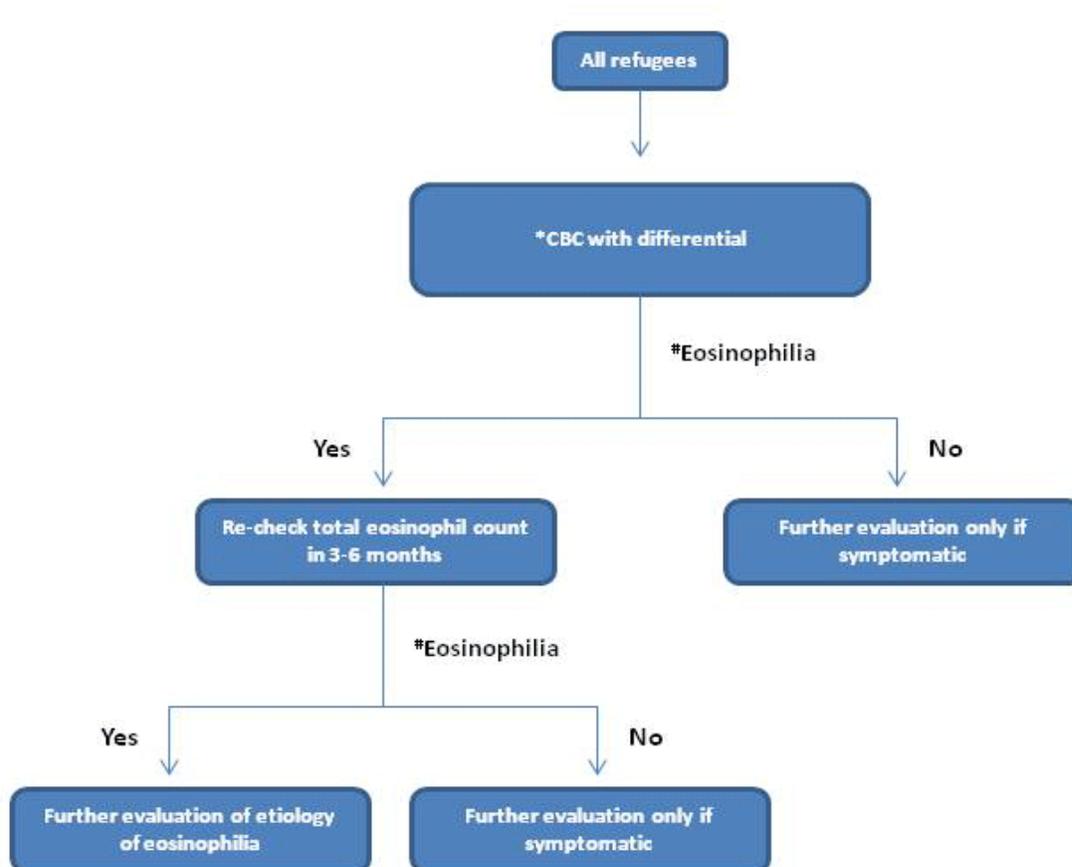


- *CBC Complete blood count and differential (this is routinely recommended for all arriving refugees as part of their general health screening)
- #Presumptive treatment is an acceptable alternative
- §See <http://medicalletter.org/hidden/parasitic2004.pdf>, the updated 2007 Medical Letter on Drugs and Therapeutics can be purchased at www.themedicalletter.org
- £Eosinophilia = an eosinophil count of >400 μ L

Commercial laboratories offer serology testing for schistosomiasis and strongyloidiasis. CDC performs reference testing only to confirm test results, which are occasionally difficult to interpret or equivocal.

Intestinal Parasite Screening

Figure 3. Screening of asymptomatic refugees for parasitic infection who received pre-departure treatment for both strongyloides (ivermectin or 7 days of albendazole) and schistosomiasis (praziquantel)



- *CBC Complete blood count and differential (this is routinely recommended for all arriving refugees as part of their general health screening)
- #Eosinophilia = an eosinophil count of $>400 \mu\text{L}$