DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control and Prevention

**Update Alert: Interim Clinical Guidance for Providers Caring for Newcomers from Afghanistan**

*December 20, 2021*

Dear State Refugee Health Coordinator and Refugee Health Partners:

The US Centers for Disease Control and Prevention (CDC) is actively supporting the arrival of Afghan evacuees who are being admitted to the United States through Operation Allies Welcome (OAW), and is working closely with partners in state and local government, non-governmental organizations, and the private sector. Afghan Special Immigrant Visa (SIV) holders and now humanitarian parolees are eligible for benefits through the Office of Refugee Resettlement (ORR). These benefits include a domestic medical screening examination to be completed at their final destination.

As outlined in the notification letter sent October 29, 2021, CDC recommends that OAW Afghan evacuees (both parolees and SIVs) visit a healthcare provider after arrival at their final destination for a domestic medical screening examination. The medical processes conducted at Safe Haven sites, although helpful in addressing initial vaccination and TB screening needs, do not provide a comprehensive medical assessment. Afghan evacuees may require additional vaccines (such as second COVID-19 vaccinations) and screening (e.g., lead screening for children, complete blood counts), and will need to be linked to a clinician in their new community. The domestic medical screening examination provides an opportunity for this comprehensive medical exam. Health conditions that have been found at the Safe Havens have been outlined in previous notifications and the CDC Health Alert Network. This notification is to raise awareness of certain potentially common, but lesser known, high-impact health conditions.

***Cutaneous Leishmaniasis***

CDC has been notified of a number of cases of cutaneous leishmaniasis in Afghan evacuees. Leishmaniasis is a parasitic disease caused by *Leishmania* parasites transmitted by the bite of infected sand flies. It is found in parts of the tropics, subtropics, and southern Europe, as well as Afghanistan. The most common form is cutaneous leishmaniasis, which causes skin sores. Some people have a silent infection, without any symptoms or signs. The sores typically develop within a few weeks or months of the sand fly bite, in rare cases it can appear years later in the context of trauma or immunosuppression. The lesions typically evolve from papules to nodular plaques to ulcerative lesions, with a raised border and central depression, which can be covered by scab or crust. Some lesions persist as nodules. The lesions are typically painless but can be painful, especially if ulcerative lesions become infected with bacteria or if the lesions are near a joint. Patients with localized cutaneous leishmaniasis commonly develop more than one primary lesion (on the same or different parts of the body), satellite lesions, regional lymphadenopathy (occasionally bubonic), and/or nodular lymphangitis. In some cases, lymphadenopathy is noted before skin lesions develop. Lesions can persist for many months or years: some lesions self-resolve and others require treatment. Additional information about cutaneous leishmaniasis is available from the CDC's Division of Parasitic Diseases and from the University of Minnesota's FAQs for Health Care Providers Cutaneous Leishmaniasis (CL) Risk, Diagnosis, and Treatment in Afghan Evacuees. Lastly, the Minnesota Center for Excellence in Newcomer Health and CDC will be hosting a webinar on the management of cutaneous leishmaniasis in early 2022. Additional details are forthcoming.

Refugees are not routinely screened or tested for cutaneous leishmaniasis during medical processing at Safe Haven sites, or as part of the domestic medical screening exam. **Those presenting with signs and symptoms suggestive of should receive cutaneous leishmaniasis testing in addition to other dermatological testing.**

**Clinicians conducting domestic medical screening examinations should maintain a high index of suspicion of cutaneous leishmaniasis in new arrivals from Afghanistan.** Diagnosis and management are complex and expert consultation is recommended. Questions regarding testing should be submitted to pathology@cdc.gov and leishmania@cdc.gov. Not all cases of cutaneous leishmaniasis require treatment. Therefore, treatment decisions should be individualized, in consultation with CDC.

***Lead Screening***

Lead is a known neurotoxicant, and exposure can result in adverse health outcomes including death. Around the world, including Afghanistan, environmental lead hazards are common and may include leaded gasoline, industrial emissions, lead-based paint, and burning of waste containing lead. Other environmental and occupational exposures include living near or working in mines, ammunition manufacturing, smelters, or battery recycling facilities. Furthermore, household and personal use items have been associated with increased lead levels, both before and after US arrival, such as car batteries used for household electricity, lead-glazed pottery, pewter or brass utensils or cooking pots, pressure cookers, leaded crystal, and chipped or cracked dishes. Additionally, refugees may use or consume products contaminated with lead such as traditional remedies, herbal supplements, spices, candies, cosmetics, and jewelries or amulets.

Data collected from domestic screening exams have revealed high rates, and high blood lead levels in newcomer children and pregnant and lactating women from Afghanistan. **It is critical that domestic clinicians screen for lead exposure with a blood test in all recently arrived infants and children (≤16 years of age), as well as pregnant or lactating people from Afghanistan.** Refer to Screening for Lead during the Domestic Medical Examination for Newly Arrived Refugees for complete guidance regarding lead screening.

***Malaria Treatment***

There have been confirmed cases of non-falciparum malaria (*P. vivax*) in Afghan evacuees arriving at Safe Haven sites. There is a high malaria burden in Afghanistan, and it occurs throughout the country in areas below 2500 meters. Malaria is seasonal, with the peak season being April-December, which overlapped with the Afghan evacuation. Approximately 90% of malaria in Afghanistan is due to *P. vivax*. *Plasmodium vivax* can become dormant in the liver and present weeks to months (or longer) after last exposure.

Fever and a flu-like syndrome is the most common presentation. All individuals with fever should be immediately evaluated for malaria. Fever is frequently accompanied by shaking chills, headache, and muscle aches. Nausea, vomiting and diarrhea also may occur and are more common in children. Physical examination may be unremarkable, but fever, tachycardia, pallor, jaundice, and splenomegaly may be observed. Severe malaria (complicated malaria) may present with mental alternation/confusion/coma, seizures, and signs of other end-organ damage like kidney failure. Although *P. falciparum* is more likely to cause severe disease, *P. vivax* is also known to cause severe disease and death.

Malaria should be considered in any Afghan evacuee with a fever of unknown origin. Diagnosis can be difficult. The most available tests are malaria blood films (thick and thin smears) and rapid diagnostic testing (RDT). When available, both blood smears and RDT should be performed at the initial encounter (RDT will provide immediate results, blood smear may be more sensitive and is more specific and provides information to inform proper treatment such as the level of parasite density). Polymerase chain reaction testing (PCR), when available, can augment diagnosis. It must be noted that the only brand of malaria RDT available in the US has lower sensitivity for *P. vivax*. A negative RDT or a single negative blood smear does not rule out malaria. A minimum of three thick and thin blood smear examinations must be performed (12-24 hours apart) to rule out malaria in all febrile patients.

Treatment for malaria can be complex and is based on severity and malaria species. Expert consultation early in management is essential. CDC can be consulted for any patient where there is concern for severe malaria (CDC Malaria Hotline Monday-Friday 9a-5p EST 770-488-7788 or afterhours 770-488-7100). Treatment of an individual without severe signs or symptoms should still be done immediately as patients can decompensate quickly, especially those with *falciparum* malaria. Under current circumstances all treatment of malaria in Afghan evacuees should be monitored so patients are not lost to follow-up.

The dormant liver phase (hypnozoite phase) of *P. vivax* is not eliminated with a blood-stage treatment. In the United States, the hypnozoite phase is treated with primaquine. Due to the risk of acute hemolytic anemia, these drugs are contraindicated, or need special dosing, in people with glucose-6-phosphate dehydrogenase (G6PD) deficiency. The prevalence of G6PD in Afghanistan (predominantly "Mediterranean type") varies by population, generally ranging from 1.5%-5%. However, it is more common in some groups of Afghan males affecting approximately 10% of the population. **All individuals with *P. vivax* must be tested for G6PD deficiency prior to treatment with primaquine due to the risk of hemolytic anemia.** Primaquine is contraindicated during pregnancy and management should be discussed with an expert.

*P. vivax*, due to the hypnozoite phase, may cause illness months (and even years) after arrival in the U.S., long after malaria will be considered in a differential diagnosis.

**Resources and References**

- Centers for Disease Control and Prevention: Malaria
- Centers for Disease Control and Prevention: Malaria Diagnosis and Treatment
- University of Minnesota FAQs for Health Care Providers: Malaria Risk, Diagnosis, and Treatment in Afghan Evacuees

Clinicians providing healthcare for newcomers and/or conducting the domestic medical screening should continue to utilize CareRef, an interactive clinical tool for customized screening recommendations based on the Guidance for the Domestic Medical Screening for Newly Arrived Refugees.

The Operation Allies Welcome response continues to evolve. CDC will continue to update partners as more information becomes available.

Sincerely,

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