

Primary Care for Refugees: Challenges and Opportunities

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Since 1975, more than 3 million refugees have settled in the United States, fleeing unrest, conflict, and persecution. Refugees represent diverse ethnic, cultural, religious, socioeconomic, and educational backgrounds. Despite this heterogeneity, there are commonalities in the refugee experience. Before resettlement, all refugees must undergo an overseas medical screening to detect conditions that pose a potential health threat in the United States. On arrival, they should undergo an examination to detect diseases with high prevalence in their country of origin or departure. Refugees have higher rates of chronic pain compared with the general population, and their mental health and well-being are strongly influenced by their migration history. Refugees have higher rates of mood disorders, posttraumatic stress disorder, and anxiety than the general population. Some refugees have been tortured, which contributes to poorer health. Chronic noncommunicable diseases, such as diabetes mellitus and hypertension, are also prevalent among refugees. Many refugees may be missing routine immunizations and screenings for cancer and chronic diseases. Attention to reproductive health, oral health, and vision care will help identify and address previously unmet needs. Refugees face barriers to care as a result of cultural, language, and socioeconomic factors. (*Am Fam Physician*. 2017;96(2):112-120. Copyright © 2017 American Academy of Family Physicians.)

► See related editorial on page 81, and related article in the July/August 2017 issue of *Family Practice Management*, pages 21-27.



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More than 65 million persons worldwide were forcibly displaced in 2015, a figure that the United Nations says is the highest level ever recorded and is likely to increase^{1,2} (Table 1,³ Figure 1³). The United Nations defines a refugee as someone who, “owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country.”⁴

Since 1975, more than 3 million refugees have settled in the United States.⁵ Each year tens of thousands of refugees are admitted from select conflict areas as part of the U.S. State Department’s sponsored resettlement program (Figure 2).³ The number was expected to increase to 100,000 in fiscal year 2017,⁶ but cuts have recently been proposed. Refugee status requests are processed overseas (often in refugee camps) by U.S. authorities in a process that may take up to two years.⁷ After being vetted and approved, refugees are connected to one of nine U.S.-based

resettlement agencies for assistance with medical care, housing, language, and vocational training.

Refugees represent a diverse group of persons from different ethnic, cultural, religious, socioeconomic, and educational backgrounds. Despite this heterogeneity, there are commonalities among refugees that can affect health: adversity and trauma, resilience, displacement, migration, and resettlement. This article summarizes some of the issues commonly encountered in the primary care of refugee populations.

The Newly Arrived Refugee

When caring for newly arrived or former refugees, it is useful to consider their health status in three distinct phases: preflight, during flight/camp/predeparture, and at/after arrival (Table 2).^{8,9} These phases are associated with specific challenges, risks, and exposures, and can vary in length. Many refugees and their families may live in camps for decades before resettlement.

Before resettlement, all refugees undergo screening to detect conditions that may pose a public health threat in the United States¹⁰

Table 1. Top 10 Countries of Origin for Refugees Resettled in the United States

Country	Number of refugees
Myanmar (formerly Burma)	149,020
Iraq	125,970
Bhutan	84,550
Somalia	62,460
Iran	34,791
Cuba	34,522
Democratic Republic of the Congo	24,108
Eritrea	12,179
Burundi	10,935
Sudan	10,633

Information from reference 3.

(eTable A). This examination is performed overseas, following technical guidelines from the Centers for Disease Control and Prevention (CDC) with oversight from the U.S. State Department and the International Organization for Migration.¹¹ Documentation from this examination is available to state and local health departments through the National Notifiable Diseases Surveillance System (<http://www.cdc.gov/nndss/nedss.html>). Recommendations for vaccination and empiric treatment of parasitic infections vary by countries of

origin and departure. The CDC recommendations for predeparture vaccinations are available at <http://www.cdc.gov/immigrantrefugeehealth/pdf/current-presumptive-immunization-schedules.pdf>; recommendations for empiric treatment of parasitic infections are available at <http://www.cdc.gov/immigrantrefugeehealth/pdf/intestinal-parasites-domestic.pdf>.

The CDC recommends that refugees receive a medical screening within 30 days of arrival in the United States (Tables 3¹¹⁻²⁴ and 4²⁵). This examination should be conducted by a licensed clinician in the presence of an interpreter, if necessary.¹¹ It can be performed at the local health department or in community or private primary care clinics. The CDC has developed detailed guidelines for physicians who provide or are interested in providing this service.²⁶ The examination should focus on communicable diseases, mental health problems, oral health, and nutrition status in all refugees, as well as lead levels, gaps in immunizations, and growth status in children.²⁷ A list of codes from the *International Classification of Diseases*, 10th revision, that are commonly used with refugee populations is available in the July/August 2017 issue of *Family Practice Management* (<http://bit.ly/2sBmcnT>).²⁸

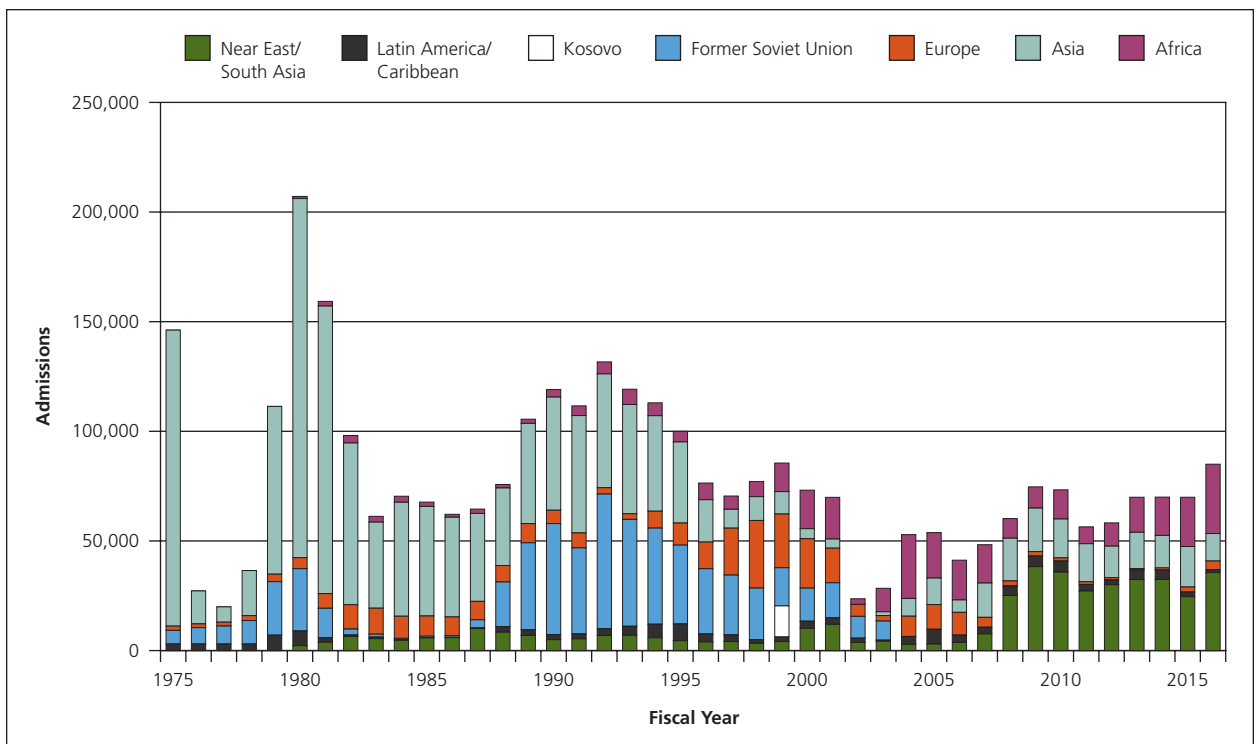


Figure 1. Refugee arrivals by region, 1975 to 2016.

Reprinted from Refugee Processing Center. Admissions and arrivals. <http://www.wrapsnet.org/admissions-and-arrivals>. Accessed January 6, 2017.

SORT: KEY RECOMMENDATIONS FOR PRACTICE

<i>Clinical recommendation</i>	<i>Evidence rating</i>	<i>References</i>
All refugees should have a medical screening examination within 30 days of arrival in the United States.	C	11
Physicians should consider whether refugees need assistance in overcoming barriers to health care.	C	29-31, 33
All refugee patients should be provided with a trained professional interpreter during physician visits, if necessary.	C	11, 37
Malaria should be considered in refugees from endemic regions who present with fever.	C	11
Physicians should assess for reactivation of latent tuberculosis in refugees who present with suggestive signs and symptoms, particularly in the first five years after resettlement.	C	11, 27
All refugees should be screened for depression, anxiety, and posttraumatic stress disorder.	C	15
Refugees should be screened for anemia, hypertension, impaired fasting glucose levels, micronutrient deficiencies, chronic pulmonary disease, and overweight or obesity.	C	11-13, 16, 63-66
Refugees without vaccine documentation should receive routine vaccinations except for varicella and hepatitis B, for which serologic testing is recommended or more cost-effective.	C	11, 16

A = consistent, good-quality patient-oriented evidence; B = inconsistent or limited-quality patient-oriented evidence; C = consensus, disease-oriented evidence, usual practice, expert opinion, or case series. For information about the SORT evidence rating system, go to <http://www.aafp.org/afpsort>.

There is geographic variability in who provides the initial examination. To avoid redundancy, it is important when seeing a refugee patient for the first time to ascertain whether the initial examination has already been completed. If it has, records should be requested from the health department; some health departments are responsible for screening, but not follow-up.

Common Issues in Primary Care

Refugees come from countries and regions with their own unique sets of health risks and exposures, but there

are certain presenting problems that commonly occur in the primary care setting (Table 5).¹⁰

GENERAL APPROACH

The practice of cross-cultural medicine can improve the physician-patient relationship and help transcend common barriers to care. Cross-cultural barriers may involve communication challenges stemming from language and cultural differences, and culturally based explanatory models of disease²⁹⁻³¹ (Table 6³²⁻³⁶). All refugees have the right to a trained interpreter for medical

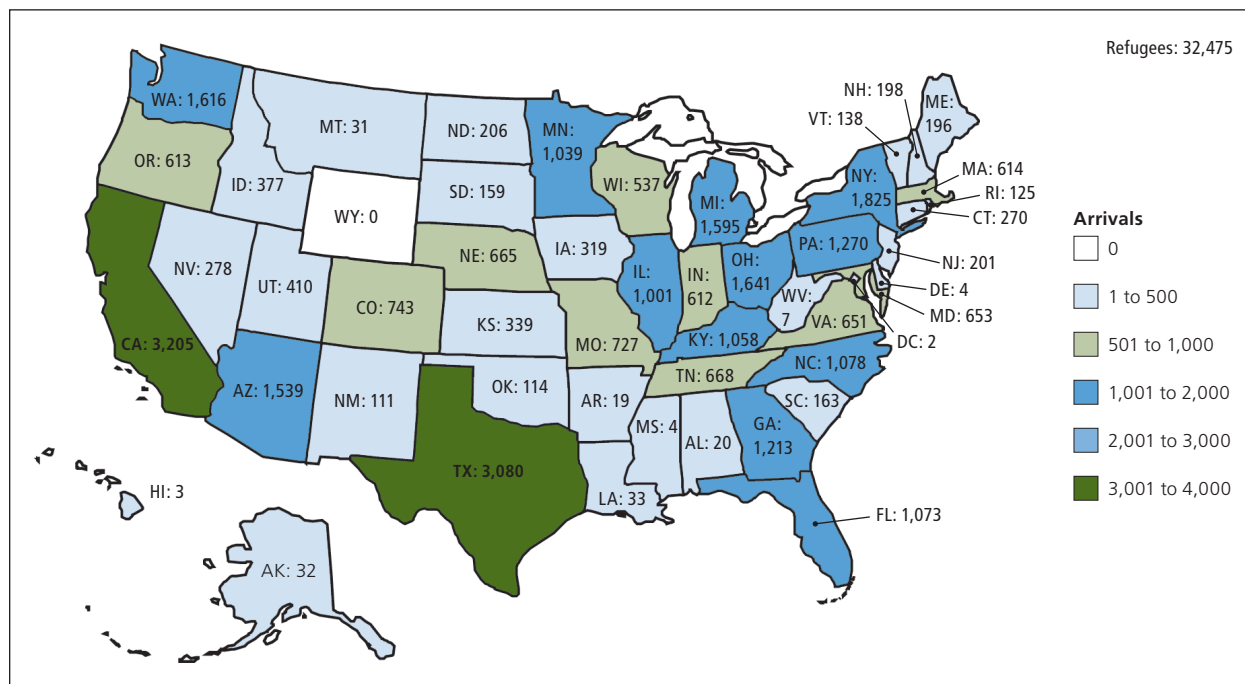


Figure 2. Refugee arrival by state, October 1, 2016, to January 31, 2017.

Reprinted from Refugee Processing Center. Admissions and arrivals. <http://www.wrapsnet.org/admissions-and-arrivals>. Accessed February 6, 2017.

visits, and clinics are responsible for arranging these services.^{11,37} Physicians should routinely inquire about the use of traditional, folk, or alternative treatments. Conversations about obtaining and using insurance, filling prescriptions, making appointments, and the roles of primary care and subspecialty care are important and may require additional resources, such as case management or health navigators.

INFECTIOUS DISEASES

Because of high prevalence in their countries of origin and the circumstances of their migration, some refugees arrive in the United States with higher risks of tropical and infectious diseases, such as tuberculosis, hepatitis A and B, human immunodeficiency virus infection, malaria, parasitic infections, and sexually transmitted infections. Thus, they are screened and treated on departure and arrival. Pre- and postmigration screening and treatment for infectious diseases have resulted in low rates (0.4%) of inadmissible medical conditions.³⁷ However, physicians should have a high level of suspicion when refugee patients present with clinical signs and symptoms consistent with imported communicable diseases, even if they occur months to years after resettlement. Malaria should be considered in refugees from endemic regions who present with fever.¹¹ Reactivation of tuberculosis should be considered in refugees presenting with suggestive signs and symptoms. The highest risk of reactivation occurs in the first few years after arrival, with 50% of cases occurring in the first five years after resettlement.^{11,27}

ORAL HEALTH

Dental care is often neglected in refugees, and dental problems may be related to dietary issues, poor access to oral health services, or a history of torture or trauma.^{39,40} An oral health examination is recommended, with appropriate referrals, when necessary. Physicians should be aware of the potential oral health effects acculturation may have—including exposure to a Western diet high in sugar—and counsel patients appropriately.⁴¹⁻⁴³

CHRONIC PAIN AND MUSCULOSKELETAL SYMPTOMS

Studies have found rates of chronic pain as high as 65% to 83% in refugees (compared

with 22% in the general population).³⁰ Common symptoms in refugees include generalized musculoskeletal and body pain; headaches; and abdominal, pelvic, and chest pain.³⁰ Refugees who have pain should undergo a thorough history and examination, and if no organic causes are detected, clinicians should consider a history of trauma as the potential cause. One study found that 78% of tortured patients had persistent pain in one or more locations; these were not predominantly psychological manifestations, but were often physical consequences of trauma.^{31,44} Posttraumatic stress disorder (PTSD), depression, and somatization also contribute to chronic pain.³⁰ Physicians should consider a range of treatment modalities, including physical therapy, acupuncture, trigger point injections, massage, antidepressants, cognitive behavior therapy, and relaxation therapy.³¹

MENTAL HEALTH

The mental health needs of refugees may be substantial and are likely to present in the primary care setting.⁴⁵⁻⁴⁷

Table 2. Questions for Physicians to Consider at Each Phase of the Refugee Journey

Preflight

- What was the patient’s general health status and health history before flight (nutrition, chronic disease, immunization status, medical and surgical histories)?
- What are the patient’s social determinants of health (including economic status and education level)?
- Was the patient exposed to violence, threats, torture, sexual violence, or imprisonment?
- Did the patient undergo female genital mutilation in her home country?
- Did the patient have access to age-appropriate preventive services (e.g., cancer screening)?

Flight/camp/predeparture

- Did the patient experience or witness violence, torture, or sexual violence?
- What is the patient’s experience regarding loss of loved ones, death, and hiding?
- Did the patient have any mental health challenges or diagnoses?
- Did the patient have access to food?
- Which basic needs were lacking (food, shelter, health services)?
- How long was the patient in a refugee camp? In hiding? On the run?
- Did the patient receive the recommended screenings and treatments in accordance with requirements from the Centers for Disease Control and Prevention and U.S. State Department?

Arrival/postarrival

- Did the patient complete the overseas screening examination and presumptive treatments and immunizations?
- What is the patient’s current mental health status?
- What is the patient’s current access to care and services, and ability to navigate the system (e.g., health insurance status, case management, literacy level)?

Information from references 8 and 9.

Table 3. CDC Recommendations for Initial Screening of Newly Arrived Refugees

Screening	Recommendation on arrival	Action
Hepatitis B	Screen all refugees from countries with greater than 2% prevalence of chronic hepatitis B (all countries in Africa, Asia, and the Middle East)	Order HBsAg and anti-HBs tests
Immunizations	Check vaccine record from prearrival; if unvaccinated or no documentation, vaccinate (except for varicella and hepatitis B)	Vaccinate per CDC age-appropriate guidelines if unvaccinated; order varicella zoster virus immunoglobulin G and anti-HBs tests before vaccinating
Laboratory screening tests	Order non-disease-specific laboratory tests as indicated (Table 4)	Order basic metabolic panel, CBC with differential, or urinalysis as indicated
Lead	Test all children 6 months to 16 years of age; repeat test in children 6 months to 6 years of age 3 to 6 months after resettlement	Order serum lead level
Mental health	Review prearrival records; obtain history and perform physical examination with a focus on trauma and maltreatment; perform mental status examination; screen for depression and PTSD; refer when indicated	Consider using a PTSD/depression/trauma screening tool
Nutrition and growth	Obtain anthropometric measurements and body mass index in all refugees; test all children 6 months to 59 months of age; screen for iron deficiency anemia in all refugees; test for or treat vitamin D deficiency and vitamin B ₁₂ deficiency*	Treat with age-appropriate multivitamin; order CBC with differential; consider testing serum 25-hydroxyvitamin D level or treat with vitamin D*; treat Bhutanese refugees with oral vitamin B ₁₂ and consider treatment in other populations*
Parasitic infections	Check prearrival empiric treatment documentation, and treat or test if results are undocumented or if no prearrival empiric treatment was given	See CDC guidelines (http://www.cdc.gov/immigrantrefugeehealth/pdf/intestinal-parasites-domestic.pdf)
<i>Helicobacter pylori</i> *	Test refugees with epigastric pain or gastrointestinal symptoms	Order <i>H. pylori</i> stool antigen or breath test*
Malaria	Empirically treat all refugees from sub-Saharan Africa who did not receive prearrival treatment (exceptions: test women who are pregnant or breastfeeding and children who weigh less than 5 kg [11 lb])	Treat with atovaquone/proguanil (Malarone) or artemether/lumefantrine (Coartem); order thick and thin blood smears
Schistosomiasis	Test or treat all refugees from sub-Saharan Africa	Order serologic tests; treat with praziquantel (Biltricide)
Soil-transmitted helminths	Test or treat all refugees	Treat with albendazole (Albenza); order ova and parasite stool examination two times, plus CBC with differential
<i>Strongyloides</i>	Test or treat all refugees (except those from <i>Loa loa</i> -endemic regions, because persons with loiasis can have severe adverse events when treated with ivermectin [Stromectol])†	Order serologic tests; treat with ivermectin
Pregnancy	Screen all females of childbearing age	Order urine pregnancy test
Sexually transmitted infections		
Gonorrhea and chlamydia	Test refugees based on age-appropriate recommendations, symptoms, urinalysis results positive for leukocyte esterase, or history of sexual assault	Order urine nucleic acid amplification test
HIV	Test all refugees who have not been tested previously	Order 4th-generation HIV 1 and 2 antigen and antibody test
Syphilis	Test all refugees older than 15 years if overseas test results are not available; test those younger than 15 years who have a history of sexual activity or assault, or a mother with syphilis	Order Venereal Disease Research Laboratory or rapid plasma reagin test
Tuberculosis	Assess risk with a targeted history and physical examination, and screen all refugees with tuberculin skin test or interferon-gamma release assay; if screen is positive, order chest radiography and treat active or latent tuberculosis (http://www.cdc.gov/tb/publications/tbi/treatment.htm#treatmentRegimens)	Order tuberculin skin test (preferred in children younger than 5 years) or interferon-gamma release assay (preferred in persons with history of bacillus Calmette-Guérin vaccination)

Anti-HBs = hepatitis B surface antibody; CBC = complete blood count; CDC = Centers for Disease Control and Prevention; HBsAg = hepatitis B surface antigen; HIV = human immunodeficiency virus; PTSD = posttraumatic stress disorder.

*—Not specifically recommended by the CDC, but evidence supports treating/testing.¹¹⁻¹⁴

†—A list of *L. loa*-endemic areas is available at <http://www.cdc.gov/immigrantrefugeehealth/guidelines/overseas/intestinal-parasites-overseas.html#box-1> (accessed January 28, 2017).

Information from references 11 through 24.

Table 4. Recommended Laboratory Tests for Newly Arrived Refugees

Test	Conditions being detected	Population	Comments
Basic metabolic panel	Hyperglycemia, renal disease	Refugees with appropriate comorbidities or from groups with a high prevalence of renal disease (e.g., Hmong)	—
Complete blood count with differential	Eosinophilia, inherited anemias, iron deficiency anemia, thrombocytopenia, other conditions	All refugees	Eosinophilia is suggestive of parasitic infection Common causes of anemia in refugees can be found at https://www.cdc.gov/immigrant-refugeehealth/guidelines/domestic/general/discussion/complete-blood-count.html
Urinalysis	Hematuria, renal disease, schistosomiasis, sexually transmitted infections, systemic disease	All refugees able to provide a clean-catch urine specimen	No evidence of cost-effectiveness

Information from reference 25.

The specific types of mental health conditions are strongly influenced by the migration history and the type and duration of exposure to adversity encountered before, during, and after a refugee's flight.⁴⁸ Compared with the general population, refugees have higher rates of mood disorders, anxiety, and PTSD. They may present with somatic symptoms, sleep disorders, fatigue, paranoia, or suicidal thoughts.⁴⁵ Resettled refugees are 10 times more likely than the rest of the population to have PTSD, and depression is a common comorbidity.^{40,49-51} PTSD may present years after arrival, even long after resettlement.^{51,52} There are multiple instruments and tools to screen for depression, anxiety, and PTSD.^{15,53} Two well-known tools that are validated in several languages and used in refugee populations are the Hopkins Symptom Checklist-25 (<http://hpvt-cambridge.org/screening/harvard-trauma-questionnaire/>) and the Refugee Health Screener (<http://refugeehealthta.org/2012/02/08/refugee-health-screener-15-rhs-15/>). Some of these specialized questionnaires may require a fee to use (see websites for information on purchasing), but routinely used primary care screening tools for PTSD, anxiety, and depression may be sufficient (although not necessarily validated in refugee populations or in different languages).

Referral is recommended to health care professionals who specialize in providing psychological assistance to immigrants and refugees, and who offer language-congruent and culturally appropriate care.

TRAUMA AND TORTURE

Mental health problems may be exacerbated by a patient's history of trauma or

torture. PTSD is more common in refugees who have been exposed to torture and violence. Trauma and torture are common among refugees; multiple studies show the prevalence to be more than 50%,^{51,54-57} and a recent analysis by the Center for Victims of Torture estimated that 1.3 million refugees who survived torture currently live in the United States.⁵⁸

According to a study of immigrants to the United States who had experienced political violence or persecution, only 3% ever told a doctor about it, and none were ever asked by a physician if they were affected by torture.⁵⁹ Although screening for such trauma is a sensitive issue,⁶⁰ uncovering a history of exposure to violence may make it easier to understand a patient's somatic symptoms and may relieve some of the stress of assimilation.^{61,62} The CDC recommends asking two questions:

Table 5. Common Presenting Health Problems in Refugees

Mental health problems	Pain
Adjustment disorder	Abdominal pain
Anxiety	Headache
Depression	Musculoskeletal pain
Posttraumatic stress disorder	Pelvic pain in females
Sleep problems	Undiagnosed chronic conditions
Social isolation	Asthma
Nutritional problems	Chronic obstructive pulmonary disease
Anemia	Diabetes mellitus
Overweight/obesity	Dyslipidemia
Vitamin B ₁₂ deficiency	Hypertension
Vitamin D deficiency	Impaired fasting glucose levels
	Oral health problems

Adapted with permission from Eckstein B. Primary care for refugees. *Am Fam Physician*. 2011;83(4):432.

Table 6. Barriers to Health Care for Refugees

Individual barriers

Difficulty obtaining medications
History of trauma or torture
Lack of familiarity with U.S. health care system
Lack of transportation
Limited English proficiency
Low health literacy
Mental health comorbidities
Prioritizing of basic needs, family integrity, and social adjustment over medical concerns

Clinician barriers

Limited availability of subspecialist consultants
Limited expertise in refugee care
Limited use of interpreters
Time constraints

Systemic barriers

Anti-immigrant sentiment in areas of resettlement
Lack of professional interpreters
Lack of transportation to medical appointments
Limited training in English as a second language
Multiple, fragmented agencies, resources, and clinical care professionals
Refugee Medical Assistance insurance coverage limited to 8 months (insurance eligibility under the Affordable Care Act varies by state)

Information from references 32 through 36.

“Were you ever a victim of violence in your former country?” and if yes, “Would you like to describe what happened to you?”¹⁷ A commonly used screening tool is the Harvard Trauma Questionnaire, which has been translated into six languages (<http://hprt-cambridge.org/screening/measuring-trauma-measuring-torture/>).

CHRONIC CONDITIONS

Chronic, noncommunicable diseases have a high prevalence among refugees.⁶³ This is true not only in those from higher-income countries, but also in refugees from less developed regions; this reflects the increasing worldwide burden of these conditions. More than 50% of adult refugees in the United States have at least one noncommunicable disease, and 9.5% have three or more.⁶³ Noncommunicable diseases vary widely among specific populations, but conditions commonly identified in refugee populations include anemia, hypertension, impaired fasting glucose levels, micronutrient deficiencies, chronic pulmonary disease, and overweight or obesity.^{11-13,16,63-66}

Health Maintenance

Refugees from countries with inadequate or inefficient health systems may be missing immunizations and routine recommended screenings for cancer and chronic diseases. They may be unaccustomed to the concepts of chronic disease management and preventive care.¹⁶ It is not necessary to complete all routine health maintenance during the first visit, but it should be addressed in subsequent encounters. Attention to women’s health, family planning, cancer screening (breast, colon, and cervical), oral health, vision, and chronic disease screening (hyperlipidemia, diabetes mellitus, hypertension, and hepatitis C) will help identify and address previously unmet health care needs.³¹ Age-appropriate immunizations should be administered after a thorough review of available records. If records are unavailable, it is more cost-effective to administer vaccines rather than obtain titers, with the exception of varicella and hepatitis B; for these diseases, serology testing and vaccinating only if nonimmune are more cost-effective.^{11,16}

Final Comment

Despite the challenges, working with refugees is highly rewarding and offers an opportunity to not only provide clinical care, but also be inspired by persons who have shown great perseverance and resilience against many odds. *eTable B* lists useful resources for family physicians who care for refugee patients.

This article updates previous articles on this topic by Eckstein¹⁰ and by Gavagan and Brodyaga.⁶⁷

Data Sources: We searched Medline and PubMed using the keyword refugee(s), alone and with the following terms: health, mental health, torture, chronic disease, screening, infectious disease, oral health, and health system. Another key resource was the CDC website for refugee and immigrant health (<http://www.cdc.gov/immigrantrefugeehealth/exams/medical-examination.html>). Search dates: April 24, 2016, to October 15, 2016.

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REFERENCES

- Edwards A. Global forced displacement hits record high. June 20, 2016. <http://www.unhcr.org/en-us/news/latest/2016/6/5763b65a4/global-forced-displacement-hits-record-high.html>. Accessed February 13, 2017.
- United Nations High Commissioner for Refugees. Worldwide displacement hits all-time high as war and persecution increase. <http://www.unhcr.org/558193896.html>. Accessed April 24, 2016.
- Refugee Processing Center. Admissions and arrivals. <http://www.wrapsnet.org/admissions-and-arrivals>. Accessed February 6, 2017.
- United Nations High Commissioner for Refugees. UNHCR: the 1951 refugee convention. <http://www.unhcr.org/pages/49da0e466.html>. Accessed May 2, 2016.
- U.S. Department of State. Cumulative summary of refugee admissions. <https://2009-2017.state.gov/j/prm/releases/statistics/251288.htm>. Accessed April 24, 2016.
- Office of Refugee Resettlement. Fiscal year 2017 planning: Dear Colleague letter 16-05. <http://www.acf.hhs.gov/orr/resource/fiscal-year-2017-planning>. Accessed October 15, 2016.
- U.S. Department of State. U.S. refugee admissions program: application and case processing. <http://www.state.gov/j/prm/ra/admissions>. Accessed April 24, 2016.
- Ager A. *Refugees: Perspectives on the Experience of Forced Migration*. New York, NY: Cassell; 1999:1-23.
- Stein BN. The refugee experience: defining the parameters of a field of study. *Int Migration Rev*. 1981;15(1/2):320-330.
- Eckstein B. Primary care for refugees. *Am Fam Physician*. 2011;83(4):429-436.
- Centers for Disease Control and Prevention. Technical instructions for panel physicians and civil surgeons. July 15, 2014 addendum. <http://www.cdc.gov/immigrantrefugeehealth/exams/ti/panel/technical-instructions-panel-physicians.html>. Accessed April 21, 2016.
- Cuffe K, Stauffer W, Painter J, Shetty S, Montour J, Zhou W; Centers for Disease Control and Prevention (CDC). Update: vitamin B12 deficiency among Bhutanese refugees resettling in the United States, 2012. *MMWR Morb Mortal Wkly Rep*. 2014;63(28):607.
- Aucoin M, Weaver R, Thomas R, Jones L. Vitamin D status of refugees arriving in Canada: findings from the Calgary Refugee Health Program. *Can Fam Physician*. 2013;59(4):e188-e194.
- Schulz TR, McBryde ES, Leder K, Biggs BA. Using stool antigen to screen for *Helicobacter pylori* in immigrants and refugees from high prevalence countries is relatively cost effective in reducing the burden of gastric cancer and peptic ulceration. *PLoS One*. 2014;9(9):e108610.
- Centers for Disease Control and Prevention. Immigrant and refugee health: guidelines for mental health screening during the domestic medical examination for newly arrived refugees. <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/mental-health-screening-guidelines.html>. Accessed March 1, 2016.
- Centers for Disease Control and Prevention. Technical instructions for panel physicians and civil surgeons. 2009. <http://www.cdc.gov/immigrantrefugeehealth/exams/ti/panel/vaccination-panel-technical-instructions.html>. Accessed September 22, 2016.
- Centers for Disease Control and Prevention. Immigrant and refugee health: guidelines for screening for tuberculosis infection and disease during the domestic medical examination for newly arrived refugees. <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/tuberculosis-guidelines.html>. Accessed April 21, 2016.
- Centers for Disease Control and Prevention. Immigrant and refugee health: screening for hepatitis during the domestic medical examination. <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/hepatitis-screening-guidelines.html>. Accessed February 23, 2016.
- Centers for Disease Control and Prevention. Immigrant and refugee health: screening for HIV infection during the refugee domestic medical examination. <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/screening-hiv-infection-domestic.html>. Accessed February 23, 2016.
- Centers for Disease Control and Prevention. Refugee health guidelines: screening for sexually transmitted diseases during the domestic medical examination for newly arrived refugees. <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/sexually-transmitted-diseases/index.html>. Accessed March 1, 2016.
- Centers for Disease Control and Prevention. Immigrant and refugee health: malaria: domestic guidelines. <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/malaria-guidelines-domestic.html>. Accessed March 29, 2016.
- Centers for Disease Control and Prevention. Intestinal parasite guidelines for domestic medical examination for newly arrived refugees. <http://www.cdc.gov/immigrantrefugeehealth/pdf/intestinal-parasites-domestic.pdf>. Accessed March 1, 2016.
- Centers for Disease Control and Prevention. Immigrant and refugee health: screening for lead during the domestic medical examination for newly arrived refugees. <http://www.cdc.gov/immigrantrefugeehealth/guidelines/lead-guidelines.html>. Accessed March 29, 2016.
- Centers for Disease Control and Prevention. Immigrant and refugee health: guidelines for evaluation of the nutritional status and growth in refugee children during the domestic medical screening examination. <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/nutrition-growth.html>. Accessed March 29, 2016.
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases. Summary checklist for the domestic medical examination for newly arriving refugees. <http://www.cdc.gov/immigrantrefugeehealth/pdf/checklist-refugee-health.pdf>. Accessed April 15, 2016.
- Office of Refugee Resettlement. ORR state letter #12-09. July 24, 2012. http://www.acf.hhs.gov/sites/default/files/orr/state_letter_12_09_revised_medical_screening_guidelines_for_newly.pdf. Accessed March 5, 2016.
- Barnett ED. Infectious disease screening for refugees resettled in the United States. *Clin Infect Dis*. 2004;39(6):833-841.
- Walden J, Valdman O, Mishori R, Carrough M. Building capacity to care for refugees. *Fam Pract Manag*. 2017;24(4):21-27.
- Jensen NK, Norredam M, Priebe S, Krasnik A. How do general practitioners experience providing care to refugees with mental health problems? A qualitative study from Denmark. *BMC Fam Pract*. 2013;14:17.
- Crosby SS. Primary care management of non-English-speaking refugees who have experienced trauma: a clinical review. *JAMA*. 2013;310(5):519-528.
- Terasaki G, Ahrenholz NC, Haider MZ. Care of adult refugees with chronic conditions. *Med Clin North Am*. 2015;99(5):1039-1058.
- Njeru JW, St Sauver JL, Jacobson DJ, et al. Emergency department and inpatient health care utilization among patients who require interpreter services. *BMC Health Serv Res*. 2015;15:214.
- Mirza M, Luna R, Mathews B, et al. Barriers to healthcare access among refugees with disabilities and chronic health conditions resettled in the US Midwest. *J Immigr Minor Health*. 2014;16(4):733-742.
- Bellamy K, Ostini R, Martini N, Kairuz T. Access to medication and pharmacy services for resettled refugees: a systematic review. *Aust J Prim Health*. 2015;21(3):273-278.
- Wångdahl J, Lytsy P, Mårtensson L, Westerling R. Health literacy among refugees in Sweden—a cross-sectional study. *BMC Public Health*. 2014;14:1030.
- Jackson JC, Haider M, Owens CW, et al. Healthcare recommendations for recently arrived refugees: observations from EthnoMed. *Harvard Public Health Review*. 2016. <http://harvardpublichealthreview.org/>

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- case-based-recommendations-for-the-health-care-of-recently-arrived-refugees-observations-from-ethnomod. Accessed May 2, 2016.
37. U.S. Department of Health and Human Services; Office for Civil Rights. Guidance to federal financial assistance recipients regarding Title VI and the prohibition against national origin discrimination affecting limited English proficient persons – summary. <http://www.hhs.gov/civil-rights/for-providers/laws-regulations-guidance/guidance-federal-financial-assistance-title-VI/index.html>. Accessed May 2, 2016.
 38. Lee D, Philen R, Wang Z, et al.; Centers for Disease Control and Prevention. Disease surveillance among newly arriving refugees and immigrants—Electronic Disease Notification System, United States, 2009. *MMWR Surveill Summ*. 2013;62(7):1-20.
 39. Cote S, Geltman P, Nunn M, Lituri K, Henshaw M, Garcia RI. Dental caries of refugee children compared with US children. *Pediatrics*. 2004;114(6):e733-e740.
 40. Singh HK, Scott TE, Henshaw MM, Cote SE, Grodin MA, Piwowarczyk LA. Oral health status of refugee torture survivors seeking care in the United States. *Am J Public Health*. 2008;98(12):2181-2182.
 41. Keboa MT, Hiles N, Macdonald ME. The oral health of refugees and asylum seekers: a scoping review. *Global Health*. 2016;12(1):59.
 42. Nicol P, Al-Hanbali A, King N, Slack-Smith L, Cherian S. Informing a culturally appropriate approach to oral health and dental care for pre-school refugee children: a community participatory study. *BMC Oral Health*. 2014;14:69.
 43. Reza M, Amin MS, Sgro A, et al. Oral health status of immigrant and refugee children in North America: a scoping review. *J Can Dent Assoc*. 2016;82:g3.
 44. Williams AC, Peña CR, Rice AS. Persistent pain in survivors of torture: a cohort study. *J Pain Symptom Manage*. 2010;40(5):715-722.
 45. Donnelly TT, Hwang JJ, Este D, Ewashen C, Adair C, Clinton M. If I was going to kill myself, I wouldn't be calling you. I am asking for help: challenges influencing immigrant and refugee women's mental health. *Issues Ment Health Nurs*. 2011;32(5):279-290.
 46. Shannon PJ. Refugees' advice to physicians: how to ask about mental health. *Fam Pract*. 2014;31(4):462-466.
 47. Piwowarczyk L, Bishop H, Yusuf A, Mudymba F, Raj A. Congolese and Somali beliefs about mental health services. *J Nerv Ment Dis*. 2014;202(3):209-216.
 48. Kirmayer LJ, Narasiah L, Munoz M, et al.; Canadian Collaboration for Immigrant and Refugee Health (CCIRH). Common mental health problems in immigrants and refugees: general approach in primary care. *CMAJ*. 2011;183(12):E959-E967.
 49. Fazel M, Wheeler J, Danesh J. Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *Lancet*. 2005;365(9467):1309-1314.
 50. Steel Z, Chey T, Silove D, Marnane C, Bryant RA, van Ommeren M. Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. *JAMA*. 2009;302(5):537-549.
 51. Marshall GN, Schell TL, Elliott MN, Berthold SM, Chun CA. Mental health of Cambodian refugees 2 decades after resettlement in the United States. *JAMA*. 2005;294(5):571-579.
 52. Lamkaddem M, Stronks K, Devillé WD, Olff M, Gerritsen AA, Essink-Bot ML. Course of post-traumatic stress disorder and healthcare utilisation among resettled refugees in the Netherlands. *BMC Psychiatry*. 2014;14:90.
 53. Refugee Health Technical Assistance Center. Assessments for trauma and mental health in refugees. <http://refugeehealthta.org/physical-mental-health/mental-health/adult-mental-health/assessments-for-trauma-and-mental-health-in-refugees/>. Accessed February 23, 2017.
 54. Keller AS, Rosenfeld B, Trinh-Shevrin C, et al. Mental health of detained asylum seekers. *Lancet*. 2003;362(9397):1721-1723.
 55. Jaranson JM, Butcher J, Halcon L, et al. Somali and Oromo refugees: correlates of torture and trauma history. *Am J Public Health*. 2004;94(4):591-598.
 56. Willard CL, Rabin M, Lawless M. The prevalence of torture and associated symptoms in United States Iraqi refugees. *J Immigr Minor Health*. 2014;16(6):1069-1076.
 57. Shannon PJ, Vinson GA, Wieling E, Cook T, Letts J. Torture, war trauma, and mental health symptoms of newly arrived Karen refugees. *J Loss Trauma*. 2015;20(6):577-590.
 58. Higson-Smith C; Center for Victims of Torture. Updating the estimate of refugees resettled in the United States who have suffered torture. [http://www.cvt.org/sites/cvt.org/files/attachments/u11/downloads/Survivor NumberMetaAnalysis_Sept2015_0.pdf](http://www.cvt.org/sites/cvt.org/files/attachments/u11/downloads/Survivor%20NumberMetaAnalysis_Sept2015_0.pdf). Accessed October 13, 2016.
 59. Eisenman DP, Gelberg L, Liu H, Shapiro MF. Mental health and health-related quality of life among adult Latino primary care patients living in the United States with previous exposure to political violence. *JAMA*. 2003;290(5):627-634.
 60. Pottie K, Greenaway C, Feightner J, et al. Evidence-based clinical guidelines for immigrants and refugees. *CMAJ*. 2011;183(12):E824-E925.
 61. Kleijn WC, Hovens JE, Rodenburg JJ. Posttraumatic stress symptoms in refugees: assessments with the Harvard Trauma Questionnaire and the Hopkins symptom Checklist-25 in different languages. *Psychol Rep*. 2001;88(2):527-532.
 62. Miles SH, Garcia-Peltoniemi RE. Torture survivors: what to ask, how to document. *J Fam Pract*. 2012;61(4):E1-E5.
 63. Yun K, Hebrank K, Graber LK, Sullivan MC, Chen I, Gupta J. High prevalence of chronic non-communicable conditions among adult refugees: implications for practice and policy. *J Community Health*. 2012;37(5):1110-1118.
 64. Redditt VJ, Graziano D, Janakiram P, Rashid M. Health status of newly arrived refugees in Toronto, Ont: part 2: chronic diseases. *Can Fam Physician*. 2015;61(7):e310-e315.
 65. Benson J, Phillips C, Kay M, et al. Low levels of vitamin B12 can persist in the early resettlement of refugees: symptoms, screening and monitoring. *Aust Fam Physician*. 2015;44(9):668-673.
 66. Gordon SB, Bruce NG, Grigg J, et al. Respiratory risks from household air pollution in low and middle income countries. *Lancet Respir Med*. 2014;2(10):823-860.
 67. Gavagan T, Brodyaga L. Medical care for immigrants and refugees. *Am Fam Physician*. 1998;57(5):1061-1068.

Table A. Overseas Pre-Resettlement Examination and Screening Recommendations for Refugees

Examination components

Full medical history (i.e., current medical conditions and medications, previous hospitalizations, social history, and complete review of systems)

Physical examination, including eyes, ears, nose, throat, extremities, heart, lungs, abdomen, lymph nodes, skin, and external genitalia

Mental status examination including, at a minimum, assessment of intelligence, thought, cognition (comprehension), judgment, affect (and mood), and behavior

Laboratory syphilis screen

Tuberculosis screen

Appropriate immunizations*

Appropriate empiric parasitic treatment*

Class A conditions: a physical or mental disorder (including a communicable disease of public health significance or drug abuse/addiction) that renders a person ineligible for admission or adjustment of status†

Active or infectious tuberculosis

Addiction to or abuse of a specific substance‡ without harmful behavior, and/or any physical or mental disorder with harmful behavior or history of such behavior, along with likelihood that behavior will recur

Hansen disease

Untreated syphilis

Untreated gonorrhea

Class B conditions: significant health problems affecting ability to care for oneself or attend school or work, or that require extensive treatment or possible institutionalization

Inactive or noninfectious tuberculosis

Treated syphilis

Other sexually transmitted infection

Pregnancy

Treated, tuberculoid, borderline, or paucibacillary Hansen disease

Sustained, full remission of abuse of specific substances‡ and/or any physical or mental disorder (excluding addiction to or abuse of specific substances, but including other substance-related disorders) without harmful behavior, or with a history of such behavior considered unlikely to recur

*—*Prearrival immunizations and empiric parasitic treatment vary by country of origin. Current recommendations are available at <http://www.cdc.gov/immigrantrefugeehealth/pdf/current-presumptive-immunization-schedules.pdf>, and recommendations for country-specific empiric treatment are available at <http://www.cdc.gov/immigrantrefugeehealth/pdf/intestinal-parasites-domestic.pdf>.*

†—*Chancroid, granuloma inguinale, and lymphogranuloma venereum were removed as health conditions that prevent entry into the United States as of 2016.*

‡—*Amphetamines, cannabis, cocaine, hallucinogens, inhalants, opioids, phencyclidines, sedative-hypnotics, and anxiolytics.*

Adapted with permission from Eckstein B. Primary care for refugees. Am Fam Physician. 2011;83(4):431, with additional information from Centers for Disease Control and Prevention. Technical instructions for panel physicians and civil surgeons. July 15, 2014 addendum. <http://www.cdc.gov/immigrantrefugeehealth/exams/ti/panel/technical-instructions-panel-physicians.html>. Accessed April 21, 2016; and Centers for Disease Control and Prevention Division of Global Migration and Quarantine (April 2016).

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Table B. Resources for Family Physicians Who Care for Refugees

Volunteer agencies

Church World Service (<http://cwsglobal.org>)
Episcopal Migration Ministries (<http://www.episcopalmigrationministries.org>)
Ethiopian Community Development Council (<http://ecdCUS.org>)
HIAS (formerly Hebrew Immigrant Aid Society; <http://www.hias.org>)
International Rescue Committee (<https://www.rescue.org>)
Lutheran Immigration and Refugee Service (<http://lirs.org>)
U.S. Committee for Refugees and Immigrants (<http://refugees.org>)
U.S. Conference of Catholic Bishops (<http://www.usccb.org>)
World Relief (<http://www.worldrelief.org>)

Cross-cultural care

American Academy of Family Physicians (<http://www.aafp.org/afp/2005/1201/p2267.html> and <http://www.aafp.org/patient-care/public-health/cultural-proficiency.html>)
Association of Reproductive Health Professionals (<http://www.arhp.org/publications-and-resources/clinical-fact-sheets/cross-cultural>)
Centers for Disease Control and Prevention Refugee Health Profiles (<http://www.cdc.gov/immigrantrefugeehealth/profiles>)
EthnoMed (<http://www.ethnomed.org>)
Minnesota Department of Health (<http://www.health.state.mn.us/divs/idepc/refugee/topics/cultcomp.html>)
University at Buffalo Refugee Health and Cultural Awareness Program (<http://fammed.buffalo.edu/RefugeeHealth/links.html>)

Educational resources

Refugee Health Technical Assistance Center (<http://refugeehealthta.org> and <http://refugeehealthta.org/webinars/mental-health-screening-and-care/addressing-mental-health-needs-of-refugees-webinar-072711>)
Royal Australian College of General Practitioners Resources in Refugee and Migrant Health (<http://www.racgp.org.au/support/library/subject-portals/refugee>)

Torture and trauma services

Arab Community Center for Economic and Social Services (<http://www.accesscommunity.org>)
Bellevue/NYU Program for Survivors of Torture (<http://www.survivorsoftorture.org>)
Boston Center for Refugee Health and Human Rights (<http://www.bcrhr.org>)
Center for Victims of Torture (<http://www.cvt.org>)
Harvard Program in Refugee Trauma (<http://www.hprr-cambridge.org>)
Lutheran Immigration and Refugee Service Detained Torture Survivor Legal Support Network (<http://lirs.org/our-work/service-partners/migrant-services-partners/detained-torture-survivor-legal-support-network/>)
National Technical Assistance Center for Children's Mental Health (<http://gucchtdcenter.georgetown.edu/TraumaInformedCare>)
Utah Health and Human Rights (<http://www.uhr.org>)

Other resources

North American Refugee Health Conference (<http://centerforrefugeehealth.com/north-american-refugee-health-conference>)
Office of Refugee Resettlement (newsletter, guide to state programs, and general information about specific refugee groups; <http://www.acf.hhs.gov/orr>)
Society of Refugee Healthcare Providers (<http://nasrhp.org>)