MEMORANDUM

DATE: January 9, 2015

TO: NMDOH Regional Directors, Regional Health Officers, and PHD staff

THROUGH: Dan Burke, Chief, Infectious Disease Bureau

FROM: Karen Gonzales, Manager, Refugee Health Program

RE: Revised Refugee Health Protocol and Standing Orders for PHD Nurses (January 2015)

The Refugee Health Program of the Public Health Division promulgates the following updates/revisions to the Refugee Health Protocol:

- Updated guidelines for provision of presumptive treatment for intestinal parasites for all U.S.-bound refugees. PHD will no longer provide presumptive treatment for intestinal parasites. PHD will assess for completion of over-seas treatment and notify the primary medical provider of any need.
- Updated guidelines for provision of mental health services and referral process
- Updated guidelines for provision of Tuberculosis screening and treatment for refugees
- Standing Orders for Assessment and Referral For Other Health Conditions to include signature line for Regional Health Officers.

New Mexico Department of Health

Public Health Division

Refugee Health Protocol and Standing Orders for Public Health Division Nurses

January 2015

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INTRODUCTION:
There are over 50 million refugees and internally displaced people around the world. The Health and Human Services Office of Refugee Resettlement (ORR) provides fiscal support to state and local governments and volunteer refugee resettlement agencies (VOLAGs) to promote self-sufficiency among refugees through access to mainstream services such as housing, healthcare, and social services during the initial eight months of arrival into the United States (U.S.).

Refugees enter the U.S. at Centers for Disease Control and Prevention (CDC) ports of entry around the country. Relocation to Albuquerque, or elsewhere, occurs with the assistance of designated VOLAGs, such as Catholic Charities and Lutheran Family Services in New Mexico. Most refugees receive their health screening at the Southeast Heights Public Health Office (SEH PHO) in Albuquerque, which is located in the Public Health Metro Region. Refugees may choose to resettle in other areas of NM. In this case, the local PHO would be responsible for the screening. The Refugee Health Program (RHP), the refugee health nurse at the SEH PHO, and the Refugee Health Mental Health Coordinator (RHMHC) should be contacted for consultation.

The Refugee Health Program works collaboratively with the NM Human Services Department, volunteer resettlement agencies, and Public Health Offices to ensure that newly–arrived refugees have access domestic medical screening, comprehensive mental health services, culturally and linguistically appropriate language interpretation, translation of relevant written materials, and transportation to and from health/mental health screening. The health screening should take place within the first 30 days after arrival to New Mexico.

Definitions
There are several types of immigrant classification that are eligible for refugee health screening. These include:

1. Refugee: A person granted refugee status while residing abroad because he/she was unable to return to his/her native land because of past persecution or a well-founded fear of persecution based on race, religion, nationality, political opinion or membership in a particular social group. Each year, the President, in consultation with Congress, determines the number of refugees who may be admitted to the U.S. from overseas. The State Department, in cooperation with VOLAGs, facilitates the legal entry of these refugees to the U.S. after they have been granted refugee status by the Department of Homeland Security.
2. Asylee: An individual who, while physically present in the U.S., has been granted asylum by an United States Citizenship and Immigration Service (USCIS) asylum officer or an immigration judge, as a result of a fear of returning to his/her native land because of past persecution or a well-founded fear of persecution based on race, religion, nationality, political opinion or membership in a particular social group. U.S. policy, in accordance with relevant international law, recognizes that persons fleeing persecution must often rely on irregular means of escape and

may lack proper documents for arrival in a country of asylum. Like refugees admitted from overseas, persons granted asylum must meet the U.S. refugee definition, based on persecution. Persons granted asylum, known as "asylees", are eligible for permanent residence and eventual citizenship.

3. Cuban/Haitian Entrant: Any individual from Cuba or Haiti granted parole status as a Cuban/Haitian Entrant (status pending) or granted any other special status subsequently established, or any Cuban National who enters the U.S. at any location other than Miami, FL. and placed by Immigration and Customs Enforcement (ICE) into Section 240 proceedings.
4. Iraqi or Afghan Special Immigrant (S.I.V.): An Iraqi or Afghan translator or other employee of the U.S. military or government agency who is admitted to the U.S. for Lawful Permanent Residence as a result of a threat to their well being if they remain in their homeland. These Special Immigrants are eligible for the Refugee Resettlement Program as a result of an Act of Congress. This population arrives without any copies of the overseas medical exam. They are issued a green card before arrival to the United States.
5. Amerasian: An alien born in Vietnam between January 1, 1962 and January 1, 1976, who was fathered by a U.S. citizen and admitted under special provisions of U.S. law (Section 584 of Public Law 100-102 as amended by Public Law 100-461). Spouses, children, and parent or guardian may accompany the entering alien.
6. Child or Adult Victim of Severe Forms of Human Trafficking: A person over the age of 18 who has been certified as a victim of severe forms of human trafficking as defined in the *Trafficking* of *Victims Protection Act* of *2000,* such as:
    a. Sex trafficking: the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act, in which a commercial sex act is induced by force, fraud, or coercion or in which the person forced to perform such an act is under the age of 18 years; or
    b. Labor trafficking: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage or slavery.
7. Conditional Entrant: A refugee-like person who obtained such status on the basis of the immigration laws that existed prior to the Refugee Act of 1980.

Other relevant definitions include:

1. Refugee Services: Services to resettled refugees, asylees, Cuban/Haitian Entrants, etc., are designed to help them adjust to their new homeland and achieve self-sufficiency, and are funded primarily by the ORR within the Department of Health and Human Services. The refugee admissions and resettlement program is a longstanding public-private partnership, with government funding augmented by the private resources of both faith-based and non-sectarian agencies. Up to eight months of federally funded Refugee Cash and Medical Assistance is made available through the Income Support Division, NM Human Services Department, to non-economically self-sufficient

refugees, asylees and Cuban/Haitian Entrants who are not otherwise eligible for Social Security Insurance (SSI), Temporary Assistance for Needy Families (TANF) and/or Medicaid.

2. Lawful Permanent Resident (immigrant "green card" holder): An individual admitted to the U.S. for permanent residence with the ability to apply for citizenship after five years of residence in the U.S., including all the refugee and refugee-like classifications listed above, and family reunification immigrants. Only the refugee classifications may receive a refugee health screening.
3. Non-immigrant Visa Holder (tourists, students, temporary workers, etc.): An individual admitted to the U.S. on a temporary basis that may or may not have permission to work, and cannot overstay the time frame for which their visa was approved or apply for citizenship. Under certain circumstances they may apply to change status to Lawful Permanent Resident. Non-immigrants may not receive a refugee screening.

OBJECTIVE

The purpose of the domestic refugee health screening is to ensure that refugees receive treatment and care for conditions of public health significance and mental health conditions, and that such conditions do not prevent successful resettlement in the U.S.

SERVICE POPULATION

The Refugee Health Program provides integrated health/mental health screening for refugees, asylees, Cuban/Haitian Entrants, Amerasians, and victims of extreme forms of human trafficking. RHP *does not* provide screening or related services for other types of immigrants or non-immigrants.

POLICY

All immigrants, including refugees are required to have a medical examination before leaving the country they resided in prior to arrival to the U.S. Some asylees and Cuban/Haitian Entrants may not have received an overseas medical exam because asylum was granted after the person was already in the U.S. Contact the Refugee Health Program Manager if the client lacks documentation of an overseas medical examination. The pre-departure medical examination procedure consists of a physical examination, an evaluation for tuberculosis and blood test for syphilis for persons 18 years or older. Applicants under the age of 18 years can be tested if there is reason to suspect any of these diseases. The vaccination requirements include vaccines recommended by the Advisory Committee on Immunization Practices (ACIP).

1. Class A conditions: Any untreated communicable disease of public health significance is a Class A condition. Potential immigrants found to have Class A conditions are not admissible to the U.S. until treated and documentation proving treatment is approved by immigration officials. Examples of Class A conditions are: active, infectious tuberculosis; Hansen's disease; yellow fever; and current physical or mental disorder with associated harmful behavior.
2. Class B conditions: Examples of Class B conditions include active, non-

infectious tuberculosis (TB), TB infection, and current evidence of a physical or mental disorder but no history of associated harmful behavior. A follow-up medical examination should be done within 30 days after arrival to the U.S., but is not required by law. Persons with a Class B condition may be from any of the immigrant categories mentioned above, and are not specific to refugees.

Standing Orders

METHODOLOGY

Screenings and assessments outlined in this protocol will be performed by the public health nurse unless otherwise stated**.** Refugees aged birth through 14 years should be referred to a Program-approved laboratory for age-appropriate testing services. The refugee health nurse will ensure that all laboratory results associated with the domestic health screening are scanned into the client's BEHR record. In addition, the refugee health nurse shall document, in the medical record, the client's reason for declining any public health services or the reason why the services could not be performed. Copies of all laboratory results and a cover sheet detailing enclosed laboratory results and special findings will be provided to the primary care provider. Clients who obtain testing services at a Program-approved laboratory should present current Medicaid information in order to bill Medicaid directly. Services provided as part of the refugee health screen are listed in the NMDOH Refugee Health Domestic Screening Guidelines **(See Appendix A: NMDOH Refugee Health Domestic Screening Guidelines)**.

Reporting of Abnormal and Normal Laboratory Results

- Abnormal lab results are determined by the criteria established by the performing laboratory.
- Results reported in the laboratory's 'abnormal' range must be reported and tasked to the Regional Health Officer for review and signature. The abnormal lab results must be conveyed to the PCP for further evaluation and treatment. Lab results can be sent to the PCP prior to being verified by the RHO.
- All normal lab results will be reviewed and signed by the local nurse manager.
- Provide copies of all normal and abnormal laboratory results to the Primary Care Physician (PCP).

SECTION 1 STANDING ORDER FOR HEPATITIS SCREENING

Description of Condition

Viral hepatitis is a group of viral infections of the liver. Typically hepatitis B and C are chronic infections that are much more common in the source countries of the refugee program.

Clinical Assessment

- Refugees ≥ 15 years of age
    - Test for hepatitis B surface antigen (HBsAg), hepatitis B surface antibody (Anti-HBs), hepatitis B core antibody, total (Anti-HBc), and hepatitis B core IgM antibody (Anti-HBc IgM)
    - Test for HCV antibodies if client has a history of injection drug use; sharing glass pipes for smoking crack or methamphetamine; sharing of

intranasal inhalant equipment, blood transfusions; or body art or surgical procedures obtained in unsterile conditions.

- Refugees ≥ 18 months and < 15 years of age
    - Refer for hepatitis B surface antigen (HBsAg), hepatitis B surface antibody (Anti-HBs), hepatitis B core antibody, total (Anti-HBc), and hepatitis B core IgM antibody (Anti-HBc IgM)
    - Refer for HCV antibody test if client has risk factors (e.g., hepatitis C positive mother; history of blood transfusions; body art or surgical procedures obtained in unsterile conditions).

Normal and Abnormal Findings: See Methodology Section on page 8.

Follow-up and Evaluation for Treatment and Care

- If hepatitis serology is positive, follow-up according to NMDOH Hepatitis Protocol (**See *Appendix B: NMDOH Recommended Adult Testing and Immunization by Risk Groups*)**.
- Follow-up of women of childbearing age who are hepatitis B surface antigen positive is of highest priority to prevent perinatal transmission of the infection (See Perinatal hepatitis B protocol). Notify the Regional Health Officer and regional Hepatitis Nurse if you identify a pregnant woman who is HBV surface antigen positive.
- Provide client-centered education regarding disease process, prevention of transmission and re-infection, available harm reduction resources, importance of liver wellness, and referrals to specialty care for chronic disease management and/or treatment.
- Public Health does not routinely provide hepatitis A screening

SECTION 2 STANDING ORDERS FOR HIV SCREENING

Description of Condition

Beginning January 4, 2010, refugees are no longer tested for HIV infection prior to arrival in the U.S. Domestic HIV screening should be performed routinely on ***all*** new arrivals, as opt-out testing (unless the individual objects to testing, it will be done automatically). Many refugees come from regions where the HIV epidemic is firmly established with primarily heterosexual transmission and the typical North American risk factors do not apply.

Clinical Assessment

Refer to the NMDOH Standard Operating Procedures for instructions on how to collect specimen and submit to laboratory;

- Person ≥ 15 years: utilize oral HIV-1 Uni-Gold Rapid testing technology
- Persons birth through 14 years of age should be referred for an age-appropriate HIV test

- Repeat screening 1-2 months following resettlement is recommended for refugees with a recent known exposure or increased risk for disease acquisition, to identify individuals who may be in the "window period" when they arrive in the U.S. This includes persons who engaged in unprotected sexual intercourse or injection drug use 60 days prior to the initial HIV test which was conducted as part of the Domestic Health Screen. Subsequent testing should be done in accordance with CDC guidelines.

Normal and Abnormal Findings: See Methodology Section on page 8.

Follow-up and Evaluation for Treatment and Care

- Counseling, testing, and referrals services should be provided to persons identified as HIV positive in accordance with the NMDOH Protocol for HIV Linkage-to-Care (http://intranet/PHD/documents/linkage-to-careprotocol2011.pdf).
- The regional Infectious Disease Nurse Supervisor (IDNS), and if needed, the Regional Health Officer should be notified of a positive HIV report to ensure that the client is linked to appropriate follow-up treatment and care services.
- In conjunction with the IDNS, provide client-centered education regarding disease process, prevention of disease transmission, and available harm reduction resources and case management/ treatment services.

SECTION 3 STANDING ORDERS FOR IMMUNIZATION ASSESSMENT

Description of Condition

Refugees, unlike most immigrant populations, are not required to have any vaccinations prior to arrival in the United States. Since developing countries or refugee settings have limited or no access to vaccine, most refugees, including adults, will not have had completed Advisory Committee on Immunization Practices (ACIP) recommended vaccinations when they arrive in the U.S.

Beginning in December 2012, the Division of Global Migration and Quarantine (DGMQ) of the Centers of Disease Control and Prevention (CDC), the Bureau of Population, Refugees and Migration (PRM) of the U.S. Department of State, and the International Organization of Migration (IOM) initiated a pilot vaccination program for approved refugee applicants in the U.S. Refugee Admissions Program (USRAP). The goal of the pilot project is to provide cost-effective public health interventions, improve refugee health, and limit the number of vaccinations refugees require after their arrival in the U.S. Refugees departing from Ethiopia, Kenya, Malaysia, Nepal Thailand, and Uganda will receive vaccine doses at the time of initial migration health assessment, followed by doses 2 and 3 as appropriate. IOM will review vaccination records and determine whether they meet set standards. Unless medically contraindicated, refugees departing from Ethiopia, Kenya, Malaysia, Nepal, Thailand, and Uganda will receive the following immunizations prior to arriving in the U.S.:

- Diphtheria, tetanus, and pertussis (DTP)
- Hepatitis B
- Haemophilus influenza type B (Hib)
- Measles, mumps and rubella (MMR)
- Oral polio virus (OPV)
- Pneumococcal conjugate 13 (PCV-13
- Pentavalent (DTP, hepatitis B, Hib)
- Tetanus, diphtheria (Td)

Vaccinations will be documented on the refugee's Vaccination Documentation Worksheet (DS-3025) as well as in the Electronic Disease Notification (EDN) System. Contact the Refugee Health Program Manager if documentation of vaccinations listed above is incomplete for refugees originating from countries that are participating in the pilot study.

Note: All live-virus vaccines will be administered in advance of departure so that refugees, if eligible, can receive live-virus vaccine and tuberculosis testing immediately after arrival in the U.S.

Clinical Assessment

All children aged birth through 18 years are eligible for immunization using NMDOH PHD Vaccine for Children (VFC) Program funded vaccine. Adult refugees should be immunized using the adult vaccine purchased through the RHP. Adults may not be vaccinated using the VFC procured vaccine. The following services should be provided as part of the domestic health exam:

- Determine the age of each refugee and review the person's medical history and records;
- Determine vaccine needs of the person according to ACIP Recommendations and current NMDOH PHD Immunization Protocol (**http://intranet/PHD/documents/IZ_2013Protocol_Final.docx**) and assess for medical contraindications;
- Varicella vaccine should be administered to all adults who cannot provide a reliable history of clinical chickenpox, positive serological test for immunity (not offered through PHD), or who cannot provide documentation of having received two doses of Varicella vaccine at least 28 days apart. In case of doubt, vaccine should be provided.

Follow-up and Evaluation for Treatment and Care

- Provide clients with a copy of the antigen appropriate Vaccine Information Statement (VIS) written in their primary language
- Document all historical and current vaccination data in NMSIIS and provide the refugee a copy of their immunization record. The immunization card may be kept in the zipper pocket of the Cultural Orientation binder for future reference.

SECTION 4 STANDING ORDERS FOR INTESTINAL PARASITE TREATMENT

Description of Condition

Presumptive treatment for parasitic infections are administered to most U.S.-bound refugees departing from Ethiopia, Kenya, Tanzania, Rwanda, South Africa, Uganda, Malaysia, Nepal, Thailand, Iraq, and Jordan. Persons who complete the recommended treatment regimen do not require further treatment or evaluation unless they present with clinical symptoms of infection.

Clinical Assessment

- Assess all newly-arrived refugees for completion of overseas presumptive treatment for intestinal parasites **(See *Appendix D: Treatment Schedules for Presumptive Parasitic Infections in U.S.-Bound Refugees, Administered by IOM – May 2013, Intestinal Parasite Guidelines for Domestic Medical Examination of Newly Arrived Refugees*)**.
- Documentation of pre-departure presumptive treatment for intestinal parasites can be found in the refugee's IOM bag. If documentation is not included in the IOM bag, contact the Refugee Health Program for Manager and request a search of the EDN System.

The following criteria should be used to assess completion of overseas presumptive treatment:

- **No presumptive treatment:** Refugees in this category did not receive presumptive treatment for parasites prior to departure for the U.S. This group includes persons from populations not included in the table of presumptive treatment programs and those excluded due to contraindications to presumptive treatment with albendazole, praziquantel, and ivermectin in Appendix D.

- **Incomplete presumptive treatment:** Refugees in this category did not receive all of the recommended overseas presumptive treatment for parasites prior to departure.
  - Most refugee populations receive a single dose of albendazole and it is reasonable to assume they have received albendazole if they are from populations included in the presumptive treatment programs and do not have contraindications to albendazole.
  - Most refugees from sub-Saharan Africa receive predeparture praziquantel treatment for schistosomiasis if they are from populations included in the presumptive treatment programs and do not have a contraindication to praziquantel.

Follow-up and Evaluation for Treatment and Care

- Indicate on the coversheet to PCP if presumptive treatment is recommended based on the following guidelines:

- Persons ≥ 2 years who did not receive pre-departure presumptive treatment, did not complete the recommended treatment regimen, or who are not listed in the Treatment Schedule for Presumptive Parasitic Infections for U.S.-Bound Refugees, administered by IOM – May 2013 should be evaluated for contraindications and receive 400mg of albendazole, orally in a single dose.
- Refugees aged 12 months through 23 months, who did not complete recommended treatment regimens should be evaluated for contraindications and receive 200 mg of albendazole, orally in a single dose

- Common symptoms of parasitic intestinal infections include nausea, diarrhea, abdominal pain, and cramps. Refugees who present with these symptoms should be referred immediately to primary care for further evaluation and treatment. Some parasitic infections such as schistosomiasis, may present with cough (not improving, TB screen is negative) or central nervous system symptoms in addition to gastrointestinal complaints.
- Discuss with PHD Regional Health Officer or Infectious Disease Bureau physician and Primary Care Physician (PCP) if you suspect active infection.
- Refugees who did not complete presumptive treatment for strongyloidiasis or schistosomiasis should be referred to a primary care physician for follow-up and treatment.
- Provide education the importance of proper hand washing techniques to prevent the spread of infection.

SECTION 5 STANDING ORDERS FOR LEAD SCREENING

Description of Condition
All children entering New Mexico through the Refugee Health program.

Clinical Assessment
- Each child from 6 months to 16 years of age should be screened at the time of arrival to assess lead burden due to their situation in their country of prior residence.
- Persons aged 15-16 years should receive a blood lead test as part of the domestic health screen. Lead testing kits are provided by Medtox, 1-877-725-7241; include Medicaid information on requisition to ensure that Medicaid is billed directly
- Persons aged 6 months through 14 years should be referred to a Program approved laboratory for testing.

Normal and Abnormal Findings: See Methodology Section on page 8.

Follow-up and Evaluation for Treatment and Care
If possible, a second screening should be done within three to six months after the first screening for all children under 6 years old. Make the appointment during the initial screening, and provide the client with a reminder card with the second appointment date and time.

SECTION 6 STANDING ORDERS FOR MALARIA SCREENING

Description of Condition
Refugees from sub-Saharan Africa who are relocating to the United States receive presumptive treatment of asymptomatic *P. falcipaum* prior to departing from their home country. Refugees who have received pre-departure treatment with a recommended antimalarial drug or drug combination (Atovaquone-proguanil, trade name Malarone, or artemether-lumefantrine, trade names Coartem, Riamet) do not need further evaluation or treatment for malaria unless they have clinical symptoms.

Clinical Assessment
Refugees from highly endemic areas such as sub-Saharan Africa or Southeast Asia who have not received pre-departure therapy or who do not have documentation of pre-departure therapy should receive a malaria blood smear as part of their **routine** domestic health screen. Children birth through 14 years of age should be referred to a Program-approved laboratory for Malaria testing.

Note: All Malaria tests processed through the Public Health Office must have the collection date and time clearly written on the label. The laboratory must receive the specimen within **48 hours** from time of collection or it will be rejected.

Normal and Abnormal Findings: See Methodology Section on page 8.

Follow-up and Evaluation for Treatment and Care

- A positive smear should also identify the species of malaria infecting the patient. Falciparum malaria should be treated with atovaqone-proguanil or artemether-lumefantrine (alternatives can be discussed on a case by case basis). If identified, non-falciparum malaria may include infection with *P. ovale* and *P. vivax* that have dormant phases that also require treatment with a 14-day course of primaquine for eradication. Contact the Regional Health Officer or Infectious Disease physicians to discuss appropriate treatment and dosing instructions.
- Previous malaria history (especially within the last 1-2 years) should be noted in the medical record.
- New arrivals should be counseled to seek medical care if signs/symptoms develop suggestive of recurrence. These symptoms include fever, anemia, splenomegaly, chills, headache, backache, and malaise. If these symptoms are present during initial screening, discuss with Regional Health Officer or Infectious Disease Bureau physician.

SECTION 7 STANDING ORDERS FOR MENTAL HEALTH SERVICES

Description of Condition
Many refugees, if not most, will have experienced some sort of violence, atrocity or human rights abuse. Due to issues of language, culture, and the nature of traumatic experience, many of these issues can go undetected as refugees try to assimilate into a new country and culture. Such dynamics increase the likelihood of ongoing vulnerability and marginalization within refugee populations. These issues also require that treatment or service provision be tailored to the population.

The Refugee Health Program has developed a comprehensive refugee mental health component to identify mental health issues and provide referrals for follow-up and treatment services to support successful resettlement in NM. The Refugee Mental Health Coordinator (RMHC) will perform follow-up evaluation and treatment.

Process for referring refugees for mental health services
Mental health services will be provided to eligible refugees according to the following procedure:

- All newly-arrived refugees will receive an initial mental health screening as part of the domestic health screening. The screening should assess any changes in appetite, sleeping patterns, nightmares, pain and energy level. Notify the RMHC of any changes or concerns reported by the client.
- A secondary mental health screening, utilizing the RHS-15 screening tool, will be administered by the RMHC on the second visit during the domestic health screening follow-up appointment. The RHS-15 may be administer by the public health nurse in the absence of the RMHC.
- Notify the RMHC of any refugee experiencing the symptoms noted above, or who scores positive on the RHS-15, or who is referred based on signs of stress and trauma. Referrals for assessment may be made by the public health nurse, VOLAG staff or volunteer, a member of the provider network, other agency, or by request of the client or client's family
- Most refugees will be screened at the Southeast Heights Health Office. However, screening may take place at any public health office within NM. Contact the Refugee Health Program Manager, Refugee Health Nurse, or RMHC for consultation if a refugee presents at a health office other than the Southeast Height Office.

SECTION 8 STANDING ORDERS FOR NUTRITIONAL ASSESSMENT

Description of Condition
Studies have documented under nutrition and poor growth among refugee children arriving in the United States. Similarly, issues have been noted among refugee children who are overweight upon arrival to the US or become overweight after having lived here for a short period of time. A nutritional assessment should be conducted to identify any related health issues. The following should be done in order to assess the

nutritional status of newly-arrived refugees:

Clinical Assessment

- Calculate body mass index (BMI)
- Refer children birth through 14 years of age for Complete Blood Count (CBC) with differential and Comprehensive Metabolic Profile (CMP)
- Assess immediate needs for food

Normal and Abnormal Findings: See Methodology Section on page 8.

Follow-up and Evaluation for Treatment and Care

- Refer to PCP if iron deficient or for further assessment
- If applicable, provide client with information regarding nutritional support services, such as WIC.

SECTION 9 STANDING ORDERS FOR PREGNANCY SCREENING

Description of Condition

Knowledge of pregnancy status is critical to assess administration medication for the treatment for intestinal parasites and malaria, as well as other health conditions. Special precautions should be taken with women who are diagnosed with hepatitis, HIV, and STIs to prevent transmission of the infection to the baby.

Clinical Assessment

Women and girls of child-bearing age should be assessed to determine the need for a pregnancy test following the Family Planning protocol which is located in the clinical protocols section of the PHD Intranet.

Normal and Abnormal Findings: See Methodology Section on page 8.

Follow-up and Evaluation for Treatment and Care

- If history or symptoms warrant, perform a McKesson hCG Test Cassette. Follow the Family Planning Protocol for guidance in determining pregnancy status and providing follow-up services. (http://intranet/PHD/documents/01Section12014GuidelinesforClinicalServices.pdf).
- Regional Health Officer and/ or PHD Infectious Disease Bureau Medical Director should be notified of pregnancy status when abnormal lab results are reported.
- Provide pregnant women with educational material regarding the importance and availability of prophylactic treatment of infectious disease and prenatal care.

SECTION 10 STANDING ORDERS FOR SCREENING OF SEXUALLY TRANSMITTED INFECTIONS

Description of Condition
The prevalence of Sexually Transmitted Infections (STIs) in refugee populations is not well characterized and varies among populations. Because certain refugee groups are at potentially high risk for STIs, it is important to screen in order to minimize or prevent acute and chronic sequlae, as well as prevent transmission to others. Many times refugees are the victims of sexual violence and are not forthcoming about reporting this risk.

Clinical Assessment and testing

- All refugees ≥ 15 years of age regardless of reported risk factors or overseas medical history:
  - Test for syphilis infection
  - Test for Chlamydia and Gonorrhea (CT/GC) infections
- Refugees birth through 14 years of age
  - Refer for syphilis test if person is sexually active or report risk factors such as a family member with positive syphilis diagnosis or history of sexual abuse
  - Refer for Chlamydia and Gonorrhea (CT/GC) test if sexually active or report a history of sexual abuse

See the DOH STD protocol for methods of testing.

Normal and Abnormal Findings: See Methodology Section on page 8.

Follow-up and Evaluation for Treatment and Care

- Follow the NMDOH STD and HIV Protocols to determine appropriate treatment and follow-up of contacts of persons with a positive STI screen (http://intranet/PHD/documents/STDprotocol2014final.pdf).
- Provide client-centered education regarding disease process, prevention of transmission and possible re-infection, available harm reduction and family planning services

SECTION 11 STANDING ORDERS FOR SICKLE CELL SCREENING

Description of Condition
Sickle Cell Disease (SCD) is a group of inherited red blood cell disorders endemic in sub-Saharan Africa. Knowledge of this genetic disorder may help prevent decompensation due to the high altitude of much of the state of New Mexico.

Clinical Assessment
Refugee Health Program provides a Sickle Cell Index, which is a blood test to screen for sickle cell disease/trait to all newly-arrived refugees from sub-Saharan Africa who are ≥ 15 years of age. Persons aged birth to 14 years of age should be referred to a Program-approved laboratory for Sickle Cell testing.

Normal and Abnormal Findings: See Methodology Section on page 8. Notify the Refugee Health Program Manager and VOLAG case manager of a positive result in order properly track and better assist the client in finding adequate support for the condition.

Follow-up and Evaluation for Treatment and Care
Any person with a positive sickle cell screen should be referred to their medical provider further evaluation and treatment services. See *Appendix E: Center for Disease Control and Prevention: Facts About Sickle Cell Disease*). Contact local or national Sickle Cell Disease organizations to learn more about the disease and connect with others who share similar experiences. Contact information is listed below:

- University of New Mexico Children's Hospital
  Division of Hematology/Oncology
  2211 Lomas Blvd, NE
  Albuquerque, NM 87106
  Pediatric Care
  Phone: (505) 272-4461

- Sickle Cell Council of New Mexico, Inc.
  1330 San Pedro NE, Suite #201A
  Albuquerque, NM 87110
  Phone: (505) 254-9550 or (877) 471-6796
  http://www.sicklecellnm.org/

SECTION 12 STANDING ORDERS FOR TUBERCULOSIS SCREENING

Description of Condition
All refugees receive an overseas medical examination prior to their departure for the U.S. This examination is to identify individuals with conditions that, by law, necessitate exclusion from, or treatment before departure for, the U.S. Pre-departure information regarding screening, chest x-ray, diagnostic results, treatment, and clinical course is included in the refugee's overseas medical forms. Refer to the NMDOH PHD Tuberculosis Protocols which are located in the clinical protocols section of the PHD Intranet for specific guidance regarding testing, treatment and follow-up services.

Clinical Assessment
All refugees should be screened for TB regardless of overseas medical history.

- Contact the Refugee Health Program Manager if the refugee does not have copies of their overseas medical evaluation forms.
- Refugees ≥ 15 years of age
  - Provide an IGRA test (See NM DOH protocol for Diagnosis of Tuberculosis Infection).
  - Order Complete Blood Count (CBC) with differential and Comprehensive Metabolic Profile (CMP) tests.

- Refugees < 15 years of age
    - Client ≥ 5 years of age: Refer for QuantiFERON TB In-Tube test.
    - Client birth through 5 years of age: Place a Mantoux skin test (TST). Read within 48-72 hours. A one-step test is sufficient for screening in this age group. A negative TST should be considered unreliable in infants < 3 months and should be repeated when the infant is greater than 3 months of age. However, a positive TST result in this age group should be considered reliable.
- Order PA and Lateral chest x-ray for all patients with a positive Immune Gamma Release Assay (IGRA) or TST result. IGRA tests consist of QuantiFERON TB-Gold In-Tube test or T-SPOT.TB test.

Normal and Abnormal Findings: See Methodology Section on page 8.

Follow-up and Evaluation for Treatment and Care

- Complete the TB Record 001 for clients with positive IGRA or TST results and refer immediately to the TB program for treatment and follow-up.
- Contact the TB Nurse Consultants at the Central Office if you have any questions regarding screening or who should be started on treatment
- Provide client education regarding the test results and ways to minimize transmission of TB infection

SECTION 13 STANDING ORDERS FOR ASSESSMENT AND REFERRAL FOR OTHER HEALTH CONDITIONS

Description of Condition

Common health problems of refugees include hematological disorders (eosinophilia, anemia, and microcytosis), hypertension, dental carries, nutritional deficiencies, and ophthalmologic problems.

Follow-up and Evaluation for Treatment and Care

If history suggests these, work with the VOLAG case manager to assure client promptly makes and keeps an appointment with PCP. Refer all refugees to a primary care and dental provider to establish a medical home and address overall health needs.

Regional Health Officer:

Signature: _____Date: _____

References

Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Division of Global Migration and Quarantine. Domestic Refugee Health Guidelines: Malaria. November 13, 2012. http://www.cdc.gov/immigrantrefugeehealth/pdf/malaria-domestic.pdf.

Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Division of Global Migration and Quarantine. Evaluating and Updating Immunizations for Newly Arrived Refugees. September 27, 2012. http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/immunizations-guidelines.html.

Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Division of Global Migration and Quarantine. Guidelines for Mental Health Screening During the Domestic Medical Examination of Newly Arrived Refugees. May 8, 2014. http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/mental-health-screening-guidelines.html.

Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Division of Global Migration and Quarantine. Intestinal Parasite Guidelines for Domestic Medical Examinations for Newly Arrived Refugees. November 16, 2013. http://www.cdc.gov/immigrantrefugeehealth/pdf/intestinal-parasites-domestic.pdf.

Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Division of Global Migration and Quarantine. Lead Screening During the Domestic Medical Examination for Newly Arrived Refugees. September 18, 2013. http://www.cdc.gov/immigrantrefugeehealth/pdf/lead-guidelines.pdf.

Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Division of Global Migration and Quarantine. Screening for HIV Infection During the Refugee Domestic Medical Examination. April 16, 2012. http://www.cdc.gov/immigrantrefugeehealth/pdf/hiv-screening-domestic-medical.pdf.

Office of Refugee Resettlement. “Refugee Resettlement 101” Resettlement in the U.S. June 2013. www.acf.hhs.gov/programs/orr/.

Appendix A: NMDOH Refugee Health Domestic Screening Guidelines

Activity	Adults (Test Provided by PHO)	Children < 15 years refer to approved lab for blood draw
History & Physical Exam		
History (Includes review of overseas medical exam)	Overseas medical records and other available medical records should be reviewed for all newly-arrived refugees.	
Physical Exam & Review of Systems (Includes mental health, dental, hearing, and vision screening; nutritional, reproductive assessment; health education and anticipatory guidance, etc.)	All refugees should be referred to a prmary care provider or specialty care for hematolgical disorders, hypertension, dental carries, nutritional deficiences, and ophthalmologic problems	
Laboratory Tests		
Blood Lead Level	Individuals **15 - 16 years** of age	**Children 6 months to 16 years of age. Children < 6 years**: refer for second lead screen 6 months after the initial screening
Chlamydia/Gonorrhea Testing	Individuals ≥ **15 years** of age, regardless of reported risk factor	Children **< 15 years** who are sexually active, have a history of sexual abuse, or other risk factors
Cholestrol	In accordance with US Preventative Services Task Force guidelines	
Complete Blood Count with Diff.	Individuals ≥ **15 years** of age	Individuals **< 15 years** of age
Complete Metabolic Panel	Individuals ≥ **15 years** of age	Individuals **< 15 years** of age
Hepatitis B Testing	Indivduals ≥ **15 years:** Hepatitis B surface antigen **(HBsAg)**; Hepatitis B surface antibody **(Anti-HBs)**; Hepatitis B core antibody, total **(Anti-HBc)**; and Hepatitis B core Igm antibody **(Anti-HBc IgM)**	Children **> 18 months and < 15 years** of age
Hepatitis C Testing	Individuals with risk factors (e.g., history of IDU, sharing of glass pipes for smoking crack or meth; sharing intranasal inhalent equipment; overseas blood transfusions; HIV positive; body art obtained in unsterile conditions)	Children with risk factors (e.g., hepatitis C positive mothers; blood transfusions; body art obtained in unsterile conditions)
HIV Testing	Refugees ≥ **15 years** regardless of reported risk factor; use opt-out approach	Refugees **< 15 years** regardless of reported risk factor, refer to lab for testing
Pregnancy Test	Women of childbearing age: use opt-out approach	Girls of childbearing age: use opt-out approach or with consent from guardian. **In office test.**
Syphilis Testing	Individuals ≥ **15 years** of age regardless of reported risk factors or overseas medical history	Children **< 15 years** with family member with positive syphilis diagnosis, history of sexual abuse, or other risk factors
Syphilis Confirmation Test	Individual with positive VDRL or RPR test	Children with positive VDRL or RPR test
Urinalysis	Refer to PCP for testng	

Appendix A: NMDOH Refugee Health Domestic Screening Guidelines

Activity	Adults (Test Provided by PHO)	Children < 15 years refer to approved lab for blood draw
Preventive Health Interventions & Other Screening Activities		
Immunizations	Individuals with incomplete or missing immunization records	Children with incomplete or mising immunization records
Intestinal Parasites	Individuals who did not complete pre-departure presumptive treatment should be referred to their PCP for treatment. Currently, only refugees originating from Ethiopia, Kenya, Tanzania, Rwanda, South Africa, Uganda, Malaysia, Nepal, Thailand, Iraq, and Jordan are treated prior to arrival. Therefore, all refugees PLUS the groups mentioned who had contraindications at departure (e.g., pregnant) should be presumptively treated.	
Malaria Blood Smear	Individuals from sub-Saharan Africa who had contraindications to presumptive treatment at pre-departure (e.g., pregnant, lactating)	Children from sub-Saharan Africa who had contraindications to presumptive treatment at pre-departure (e.g., < 5 kg)
Mental Health Screening	All individuals should receive mental health screen. Refer clients to the Refugee Health Mental Health Coordinator for comprehensive assessment or support services. The RMHC will faciliate appropriate referrals for treatment and follow-up services.	
Sickle Cell Index	Newly-arrived refugees ≥ **15 years** from sub-Saharan Africa	Newly-arrived refugees > **5 months and < 15 years** of age from sub-Saharan Africa
Tuberculosis Screening	All persons ≥ **15 years** should receive QuantiFERON TB-Gold-In-Tube test or T-sPOT.TB test; Order PA/Lateral chest x-ray if IGRA is postive.	Children ≥ **5 years and < 15 years** should receieve QuantiFERON TB-Gold-In-Tube test. Children **birth through 5 years**, place TST and read within 48-72 hours. Order PA/Lateral Chest x-ray for all postive QFT and for TST > 5mm. Negative TST is considered unreliable in infants < 3 months; a positive TST result in this age group should be considered reliable.

Appendix B: NMDOH Recommended Adult Testing and Immunization by Risk Groups

	TESTING Recommended			IMMUNIZATION Recommended		HBIG Recommended
Risk Group	HEP A	HEP B	HEP C	HEP A	HEP B	
Current IDU	No	Yes[1]	Yes	Yes	Yes[1]	No
Person who shares crack/meth pipes or intranasal inhalant equipment such as straws	No	Yes	Yes	Yes	Yes[1]	No
Former IDU	No	Yes	Yes	No	No	No
MSM or Bisexual male	No	No	No	Yes	Yes	No
Sexual contact of MSM or IDU	No	No	No	Yes	Yes	No
Hepatitis C Positive	No	Yes	---	Yes	Yes[2]	No
Hepatitis B Acute/Chronic Carrier	No	---	Yes	Yes	No	No
HIV Positive	No	Yes	Yes	Yes	Yes[3]	No
Blood transfusion or organ transplant before July 1992	No	No	Yes	No	No	No
Person from endemic area incl. Asia, Central and Eastern Europe, Sub-Saharan Africa	No	Yes	No	No	Yes[3]	No
Heterosexual with multiple sex partners (>1 in last 6 months)	No	No	No	No	Yes	No
Person seeking evaluation or treatment for an STD	No	No	No	No	Yes	No
CONTACTS- HEPATITIS B ACUTE CASES						
Sexual contact within last 14 days[4]	No	Yes[5]	No	No	Yes[4]	Yes[4]
Household contact, no known exposure[6]	No	No	No	No	Yes	No
Household contact, known exposure (e.g. shared toothbrush or razor)	No	Yes	No	No	Yes[4]	Yes[4]
Injection partner contact within last 14 days	**FOLLOW RISK GROUP "CURRENT IDU" above**					Yes
CONTACTS – HEPATITIS B CHRONIC CASES						
Sexual contact of chronic case of HBV	No	Yes	No	No	Yes[3]	No
Household contact of chronic case of HBV	No	Yes	No	No	Yes[3]	No
Injection partner contact	**FOLLOW RISK GROUP "CURRENT IDU" above**					
CONTACTS – HEPATITIS C CHRONIC CASES Follow Risk Group recommendations above.						
CONTACTS – HEPATITIS C ACUTE CASES Follow Risk Group recommendations above. If no exposure report other than sexual exposure, consider testing recent (within past 6 months) sexual partners to identify potential infected source person(s).						

1. Current IDU/Persons who share glass pipes or inhalant equipment: Test and give first doses of hep A and hep B vaccine. Follow up with subsequent doses if susceptible.
2. If client is a current IDU, follow "Current IDU' testing recommendations. If non-IDU, vaccinate if susceptible.
3. If susceptible.
4. After blood draw for HBV serology, a single dose of HBIG (0.06ml/kg) should be given if contact was within 14 days. Begin the hepatitis B vaccine series at the same time at a different anatomical site. Complete the series if contact is susceptible.
5. If initial serology is negative, titer should be repeated in 3 months.
6. If an unvaccinated or under-vaccinated infant <12 months of age is in a household where the primary caregiver has acute hepatitis B, the infant should receive HBIG and start or complete the hepatitis B vaccine series.

Appendix C: Interchangeability Schedule for Adult Twinrix and Adult Monovalent Hepatitis A and Hepatitis B Vaccine

Pre-visit immunity status of person >18 yrs	0 month	1 month	6 months	11-12 months
No hepatitis history	T	T	T	
No hepatitis history	A and B	B	A and B	
HAV exposure **or** completed Hep A series	B	B	B	
HAV exposure **and** 1 dose Hep B		B	B	
HAV exposure **and** 2 doses Hep B			B	
HBV exposure **or** completed Hep B series	A		A	
HBV exposure **and** 1 dose Hep A			A	
1 dose Hep A	B	B	A and B	
1 dose Hep A	B	B	T	A
2 doses Hep A	B	B	B	
1 dose Hep B	A	B	A and B	
1 dose Hep B		T	T	A
2 does Hep B	A		A and B	
2 doses Hep B	A		T	A
3 doses Hep B	A		A	
1 dose Hep A **and** 1 dose Hep B		B	A and B	
1 dose Hep A **and** 1 dose Hep B		B	T	T
2 doses Hep B **and** 1 dose Hep A			A and B	
2 doses Hep B **and** 1 dose Hep A			T	A
2 doses Hep B and 1 dose Twinrix			A	A
1 dose Twinrix		T	T	
1 dose Twinrix		B	A and B	A
2 doses Twinrix			T	
2 doses Twinrix			A and B	
1 dose Twinrix **and** 1 dose Hep A		B	A and B	
1 dose Twinrix **and** 1 dose Hep A		B	T	
1 dose Twinrix **and** 1 dose Hep B			A and B	A
1 doses Twinrix **and** 1 dose Hep B			T	T
1 dose Twinrix **and** 2 doses Hep B	A		A	
1 Twinrix **and** 1 Hep B **and** 1 Hep A			A and B	
1 Twinrix **and** 1 Hep B **and** 1 Hep A			T	

Legend

A Hepatitis A vaccine

B Hepatitis B vaccine

T Twinrix vaccine

Acceptable dosing intervals

- Interval between 1st Twinrix dose and 3rd Twinrix dose should be at least 6 months
- Interval between 1st Twinrix dose and 2nd Twinrix dose should be at least 1 month
- Interval between 2nd Twinrix dose and 3rd Twinrix dose should be at least 2 months
- Recommended intervals for single antigen vaccines, when used in combination series that includes Twinrix, must still be observed.

Appendix D: Treatment Schedules for Presumptive Parasitic Infections for U.S.-Bound Refugees Administered by IOM – May 2013

Prepared by Immigrant, Refugee and Migrant Health Branch, Division of Global Migration and Quarantine, CDC

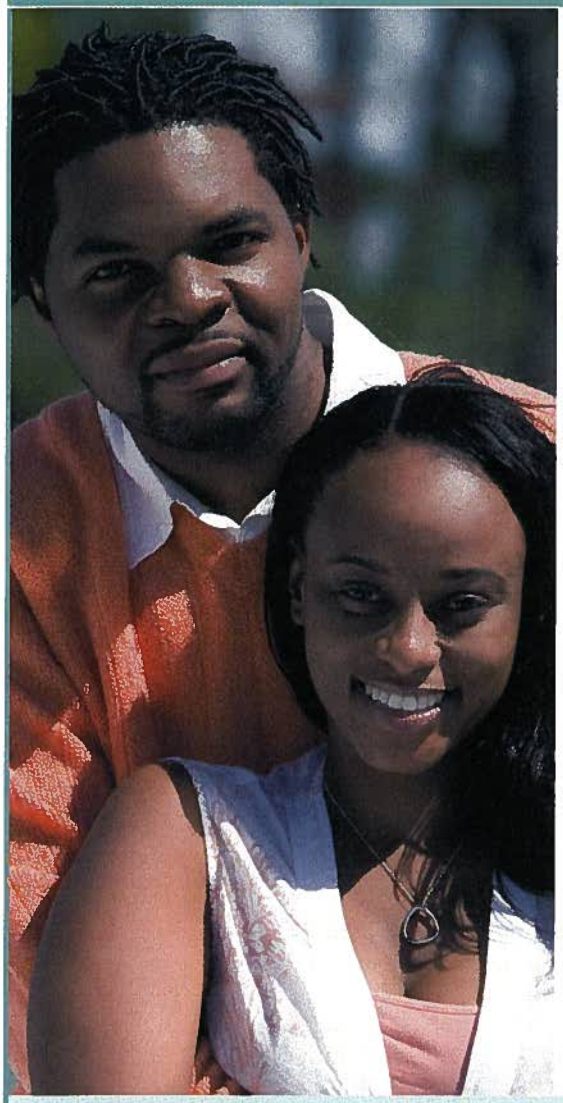
This table describes presumptive anti-parasitic treatment currently provided to the largest groups of U.S.-bound refugees. The first three columns list the region, departure country, and ethnicity/national origin of the refugees. The fourth column lists recommended presumptive treatment for parasites (including malaria).

Region	Country of Processing	Principal Refugee Groups (location)	Presumptive Parasite Treatment for Eligible Refugees[b,c]	Comments
Africa	Ethiopia	*Eritreans (Shimelba); Somalis (Kebribeya); Multiple (Addis Ababa)*	Albendazole Praziquantel Artemether-lumefantrine	Artemether-lumefantrine since Oct 2007
	Kenya	*Somalis (Dadaab); Somalis, Sudanese, Congolese (Kakuma); Multiple (Nairobi)*	Albendazole Praziquantel Artemether-lumefantrine	Artemether-lumefantrine since fall 2007
	Tanzania	*Congolese, Burundians (Kigoma)*	Albendazole Praziquantel Artemether-lumefantrine	Artemether-lumefantrine since July 2007
	Rwanda, South Africa, Uganda	*Somalis, Congolese*	Albendazole Praziquantel Artemether-lumefantrine	
Asia	Malaysia	*Burmese (Kuala Lumpur)*	Albendazole Ivermectin	-Albendazole for children 1-2 yo since Nov 2011 -Ivermectin, since Feb 2013
	Nepal	*Bhutanese (Beldangi, Sanischare, Khudunabari); other (urban)*	Albendazole Ivermectin	-Albendazole for children 1-2 yo since Feb 2012 -Ivermectin since Jan 2013
	Thailand	*Burmese (Thailand-Burma border); other (urban)*	Albendazole Ivermectin	-Albendazole for children 1-2 yo since Oct 2011 -Ivermectin since July 2011
Mideast	Iraq	*Iraqis (Baghdad, Al Walid camp)*	Albendazole	
	Jordan	*Iraqis (Amman)*	Albendazole	
	Lebanon, Syria, Turkey, Egypt	*Multiple*	None	
Europe	Russia, Ukraine, Moldova	*Russians, Afghanis, Ukrainians, Moldovans*	None	
Americas	Cuba, other	*Cubans, Colombians*	None	

a Information provided by the International Organization for Migration (IOM) during required overseas refugee medical exam
b Presumptive parasite treatments: Albendazole (for soil-transmitted helminths), 400 mg for refugees ≥ 2 yo; Albendazole, 200 mg for those 1-2 yo; Ivermectin (for strongyloides), 200 µg/kg x 2 d; and Praziquantel (for schistosomiasis), 40 mg/kg divided in 2 doses. See http://www.cdc.gov/immigrantrefugeehealth/guidelines/overseas/intestinal-parasites-overseas.html
Arthemether-lumifantrine (AL, for malaria) 6-dose treatment. See http://www.cdc.gov/immigrantrefugeehealth/guidelines/overseas/malaria-guidelines-overseas.html#opI
c Over 75% compliance rates with administration of presumptive parasite treatment have been documented for the countries listed on this table. If a country does not appear on this table, then compliance rates in that country are uncertain, so clinicians should use their judgment on a screening vs. presumptive treatment approach.

Appendix E:

What You Should Know About Sickle Cell Disease



What Is Sickle Cell Disease?

Sickle cell disease (SCD) is a group of inherited red blood cell disorders.

- Healthy red blood cells are round and they move through small blood vessels carrying oxygen to all parts of the body.
- In SCD, the red blood cells become hard and sticky and look like a C-shaped farm tool called a "sickle".
- Sickle cells die early, which causes a constant shortage of red blood cells.
- Sickle cells can get stuck in small blood vessels and block the flow of blood and oxygen to organs in the body. These blockages cause repeated episodes of severe pain, organ damage, serious infections, or even stroke.

What Causes Sickle Cell Disease?

SCD is inherited in the same way that people get the color of their eyes, skin, and hair.

- A person with SCD is born with it.
- People cannot catch SCD from being around a person who has it.

Who Is Affected By Sickle Cell Disease?

- It is estimated that SCD affects 90,000 to 100,000 people in the United States, mainly Blacks or African Americans.
- The disease occurs among about 1 of every 500 Black or African-American births and among about 1 out of every 36,000 Hispanic-American births.
- SCD affects millions of people throughout the world and is particularly common among those whose ancestors come from sub-Saharan Africa; regions in the Western Hemisphere (South America, the Caribbean, and Central America); Saudi Arabia; India; and Mediterranean countries such as Turkey, Greece, and Italy.

What Health Problems Does Sickle Cell Disease Cause?

Following are some of the most common complications of SCD:

"Pain Episode" or "Crisis": Sickle cells don't move easily through small blood vessels and can get stuck and clog blood flow. This causes pain that can start suddenly, be mild to severe, and last for any length of time.

Infection: People with SCD, especially infants and children, are more likely to experience harmful infections such as flu, meningitis, and hepatitis.

Hand-Foot Syndrome: Swelling in the hands and feet, often along with a fever, is caused by the sickle cells getting stuck in the blood vessels and blocking the blood from flowing freely through the hands and feet.

Eye Disease: SCD can affect the blood vessels in the eye and lead to long term damage.

Acute Chest Syndrome (ACS): Blockage of the flow of blood to the lungs can cause acute chest syndrome. ACS is similar to pneumonia; symptoms include chest pain, coughing, difficulty breathing, and fever. It can be life threatening and should be treated in a hospital.

Stroke: Sickle cells can clog blood flow to the brain and cause a stroke. A stroke can result in lifelong disabilities and learning problems.

National Center on Birth Defects and Developmental Disorders
Division of Blood Disorders

CDC

CS216728

How Is Sickle Cell Disease Treated?

The goals of treating SCD are to relieve pain and to prevent infections, eye damage, and strokes.

- There is no single best treatment for all people with SCD. Treatment options are different for each person depending on the symptoms. Treatments can include receiving blood transfusions, maintaining a high fluid intake (drinking 8 to 10 glasses of water each day), receiving IV (intravenous) therapy (fluids given into a vein) and medications to help with pain.
- For severe SCD, a medicine call hydroxyurea might be recommended. Research suggests that hydroxyurea can reduce the number of painful episodes and the recurrence of ACS. It also can reduce hospital stays and the need for blood transfusions among adults who have SCD.

Is There A Cure For Sickle Cell Disease?

To date, the only cure for SCD is a bone marrow or stem cell transplant.

- A bone marrow or stem cell transplant is a procedure that takes healthy stem cells from a donor and puts them into someone whose bone marrow is not working properly. These healthy stem cells cause the bone marrow to make new healthy cells.
- Bone marrow or stem cell transplants are very risky, and can have serious side effects, including death. For the transplant to work, the bone marrow must be a close match.

For more information visit: www.cdc.gov/sicklecell

Attachment A

PUBLIC HEALTH DIVISION
CLINICAL PROTOCOL/MANUAL APPROVAL SHEET

PROGRAM/BUREAU: **Refugee Health Program / Infectious Disease Bureau**

CLINICAL PROTOCOL/MANUAL TITLE: Refugee Health Screening Protocol and Standing Orders for PHD Nurses

Reviewed by: (Must have a signature from at least one clinical user of the Clinical Protocol.)

User Reviews:

Name:_____ Date:_____

Name:_____ Date:_____

Name:_____ Date:_____

Name:_____ Date:_____

Name:_____ Date:_____

Approved by:

Program Manager_____Date_____

Bureau Chief_____Date_____

Bureau Medical Director_____Date_____

PHD Medical Director_____Date_____

RegionalHealth Officer_____ Date_____

PHD Chief Nurse _____ Date_____

Attachment B

PUBLIC HEALTH DIVISION
ACKNOWLEDGEMENT AND RECEIPT OF NEW/REVISED CLINICAL PROTOCOL

PROGRAM:_Refugee Health Program / Infectious Disease Bureau_____

CLINICAL PROTOCOL/MANUAL TITLE:_Refugee Health Screening Protocol and Standing Orders for PHD Nurses

I have reviewed the document listed above and I approve it for practice in Region ____.

_____ _____
Regional Director Date

_____ _____
Regional Health Officer Date

_____ _____
Regional Director of Nursing Service Date

_____ _____
Regional Director of Nursing Service Date

I have received, reviewed and will follow this Clinical Protocol and its Standing Orders.

Staff (Clinicians, PHNs, DPSs, etc.):

_____ _____ _____ _____
Name Date Name Date

_____ _____ _____ _____
Name Date Name Date

_____ _____ _____ _____
Name Date Name Date

_____ _____ _____ _____
Name Date Name Date

_____ _____ _____ _____
Name Date Name Date

_____ _____ _____ _____
Name Date Name Date

Each clinician and PHN must review the document mentioned above and sign this sheet. (Use additional sheets as necessary.) The Nurse Manager will retain the signed copy(ies) of this sheet at the clinic and submit the original(s) to the Director of Nursing Services.