Immigrant children should be evaluated by a healthcare provider as soon as they arrive in the United States. Besides the normal and expected health care necessities of all children, there are special considerations for children entering our country, particularly those coming from developing or war-torn countries. The following provides some initial guidance, references and resources for healthcare providers.

NUTRITION AND GROWTH

Nutrition and growth in immigrant children are affected by many things including:
- Country of origin
- Access to food and health care
- Food insecurities
- Language and cultural barriers
- Presence of infectious diseases
- Vitamin/nutritional deficiencies

Nutritional assessment as recommended by the CDC includes:
- History and physical
  - Dietary history
  - Physical exam including weight, height/length, head circumference, BMI
  - Assessment of malnutrition and overnutrition
- Laboratory testing
  - CBC
  - Population-specific labs (i.e. vit B12 deficiency in those lacking access to meats)

- Age determination
  - May be difficult due to family and/or child not knowing age or DOB
  - Bone age evaluation typically used to determine age, but may not be accurate in states of malnutrition

Common vitamin/nutritional deficiencies in immigrant children:
- Iron
- Vitamin A
- Vitamin D
- Zinc
- B12
- Iodine

Growth charts:
- The CDC recommends using the WHO growth charts, which can be found at http://www.who.int/childgrowth/en/
- Catch-up growth can be delayed due to several barriers as mentioned above

MENTAL HEALTH AND DEVELOPMENTAL NEEDS

Mental health issues in pediatric immigrants are very individualized and depend upon:
- Countries of origin
- Highest risk areas
  - disrupted healthcare systems
  - conflict zones
  - under-resourced
- Status entering country and reasons for seeking entrance
  - Immigrant: individuals or families who voluntarily leave their countries to enter U.S.
  - Refugee: individuals and families in danger or displaced from home countries because of civil, political or social unrest
  - Asylum-seeker: individuals or families already in the U.S. and seeking status as asylum-seeker through government embassies
- Accompanied/unaccompanied

- Support upon arrival
  - Family members already here
  - Defined place to go to
  - Resources (financial, education, health, etc.)

Specific mental health issues
- Isolation
  - Family/community/ country/ culture
  - Language
- Depression/anxiety
  - Stress/poverty
  - Resettlement
  - Food security
  - Living situation
  - Resources/employment
- Exposure to violence/PTSD
  - Home country/during journey
  - Domestic violence and neighborhood in U.S.
  - Exploitation/abuse
MENTAL HEALTH AND DEVELOPMENTAL NEEDS - continued

Available tools for behavioral and mental health concerns
- Pediatric Symptom Checklist – long and short versions, bilingual, excellent for general screening (Bright Futures)
- Center for Epidemiological Studies (CES-D) and Center for Epidemiological Studies (CES-DC) for depression (Bright Futures)
- CRAFFT – specific for substance abuse (Bright Futures)
- SCARED - specific for anxiety (not available from Bright Futures)

Developmental assessment
- Done routinely as recommended by AAP 2006 guidelines - language development is expected to be the same for children in monolingual families as well as bilingual families
- Multilingual tools available
- Refer as soon as developmental concerns arise

Resources
- http://www.nctsn.org/content/working-unaccompanied-and-immigrant-minors

IMMUNIZATION EVALUATION

- At the first medical exam performed in the U.S., if the child cannot produce documentation of previous vaccination, vaccines should be provided
- Considerations include country of origin, record of vaccination documentation and age of child
- Vaccination records:
  - Vaccines administered outside the U.S. can be accepted if their schedule is similar to that recommended in the U.S.
  - Only written records should be accepted as evidence of vaccination
- Two accepted approaches:
  - Assume the patient is unvaccinated and
  - Immunize regardless of immunization record

TUBERCULOSIS (TB) SCREENING

- Children immigrating from countries with a high burden of TB disease (> 40 cases per 100,000), close contact with someone with TB disease or symptoms of TB disease should have a Mantoux tuberculin skin test (TST) or interferon-gamma release assay (IGRA) for Mycobacterium tuberculosis.
- Previous Bacillus Calmette-Guérin (BCG) vaccine may influence the results of the TST, however a history of vaccination with BCG should not influence interpretation of the TST.

If greater than six months of age, test antibody titers to vaccines reported. This can be considered for: measles, mumps, rubella, hepatitis A and B, and polio.
- Additional considerations:
  - MMR is not routinely administered in most developing countries
  - Zoster and Human Papillomavirus (HPV) are not required for immigrant children


Tuberculosis (TB) Screening for Immigrant Children

- Place Mantoux tuberculin skin test (TST) (preferred for children < five years of age) or draw blood for interferon-gamma release assay (IGRA) for the patients who answer yes to the following questions:

  OR
  - Close contact with someone with TB disease?
  - Symptoms/signs (S&S) of TB disease?

  YES
  - Start treatment for Latent Tuberculosis Infection (LTBI)

  NO
  - No further testing required

Physical exam, medical history, and chest radiograph

- Physical exam, medical history, chest radiograph & further lab testing for TB disease

Start treatment for TB disease

Consider consultation with TB expert for infants, young children and for persons with immunodeficiency


Primary care of the newly immigrated child - page 2 of 2