

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.



Global Health Care SIG

## Primary care of the newly immigrated child

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### 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

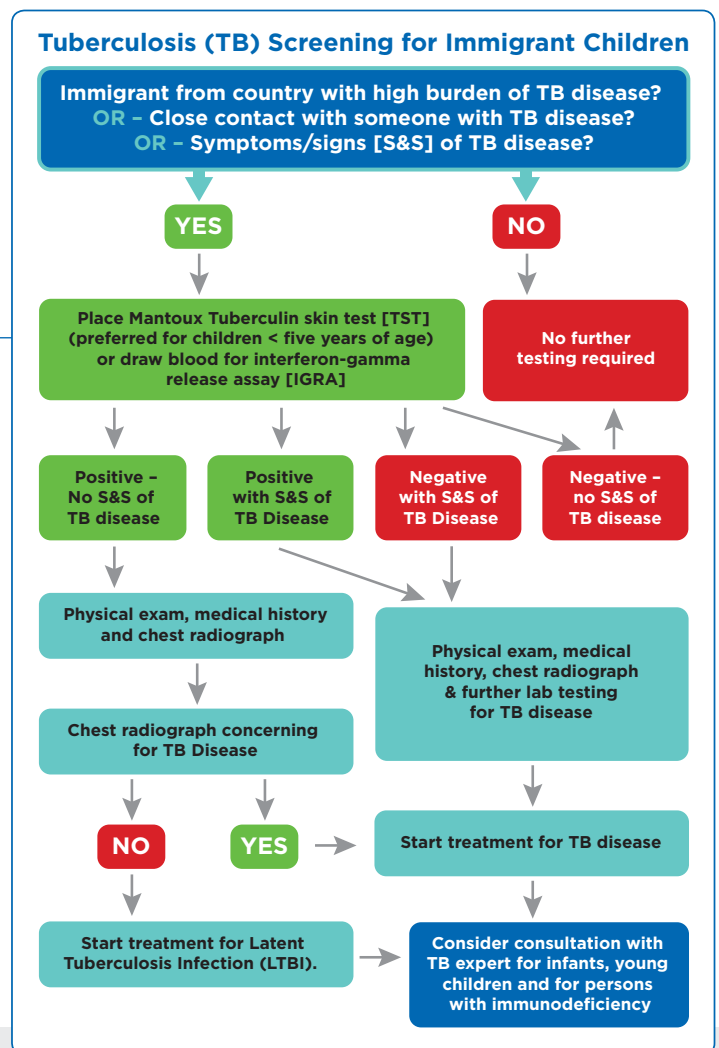
- COUNCIL ON COMMUNITY PEDIATRICS. (2013). Providing care for immigrant, migrant and border children. *Pediatrics*, doi:10.1542/peds.2013-1099
- <http://www.aap.org/en-us/advocacy-and-policy/federal-advocacy/Pages/ImmigrationReform.aspx>
- <http://www.nctsn.org/content/working-unaccompanied-and-immigrant-minors>

## 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
  - 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

- 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.**



### Nutrition and Growth References:

<http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/nutrition-growth.html>

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Ettlinger de Cuba, MPH, S., Jeng, AB, K., March, MCP, E., Cook, PhD, MAEd, J., Gayman, AB, A., Frank, MD, D., & Chilton, PhD, M. (2010, October 1). Children of Immigrants: Healthy Beginnings Derailed by Food Insecurity. Retrieved August 7, 2014, from [http://www.childrenshealthwatch.org/upload/resource/childrenimmigrants\\_brief\\_oct10.pdf](http://www.childrenshealthwatch.org/upload/resource/childrenimmigrants_brief_oct10.pdf)

### Mental Health and Developmental Needs References:

Gonzales, R. G., Suárez-Orozco, C., & Dedios-Sanguinetti, M. C. (2013). No place to belong: Contextualizing concepts of mental health among undocumented immigrant youth in the United States. *American Behavioral Scientist*, 57, 1174-1199. Retrieved from SCOPUS database.

### Immunization Evaluation References:

General recommendations on immunization: Retrieved August 12, 2014 from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5515a1.htm#tab12>

### Tuberculosis (TB) Screening References:

Centers for Disease Control and Prevention (CDC). (2012, March 29). Guidelines for screening for tuberculosis infection and disease during the domestic medical examination for newly arrived refugees. Retrieved from <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/tuberculosis-guidelines.html>

Guidelines for Evaluation of the Nutritional Status and Growth in Refugee Children During the Domestic Medical Screening Examination. (2012, April 16). Retrieved August 8, 2014, from <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/nutrition-growth.html>

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WHO. (Accessed Aug 10 2014, at <http://www.who.int/nutrition/topics/vad/en/>)

WHO. (Accessed Aug 7, 2013, at <http://www.who.int/childgrowth/en/>)

Griffin, M., Son, M., & Shapleigh, E. (2014). Children's lives on the border. *Pediatrics*, 133, e1118-e1120. Retrieved from SCOPUS database.

Kennedy, E. G. (2013). Unnecessary suffering: Potential unmet mental health needs of unaccompanied alien children. *JAMA Pediatrics*, 167, 319-320. Retrieved from SCOPUS database.

Birth to 18 and 'Catch up' Immunization schedule: Retrieved August 12, 2014 from <http://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html>  
<http://www.cdc.gov/immigrantrefugeehealth/laws-regs/vaccination-immigration/revise-vaccination-immigration-faq.html#whatvaccines>

Centers for Disease Control and Prevention (CDC). (2014, March 21). Trends in tuberculosis – United States, 2013. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm311a2.htm>