

<p><b>Indications for offering Exams/Serologies: Groups at risk, Country of Origin or Transit</b>  <b>These are suggestions, potentially incomplete, to be adapted to individual risk-profiles.</b>  <b>Elaborated by the Reference group for migrant health, paediatric suisse, 2025 – V1</b></p>
<p><b>Tuberculosis</b> (usually IGRA, Mantoux for &lt;1y, ideally not within 4 weeks after MMRV-vaccine)</p> <ul style="list-style-type: none"> <li>• <b>to all coming from high risk area</b>  HIGH RISK: (Especially sub-Saharan) Africa, Mongolia, Afghanistan, Pakistan, Indian, South-East Asia, countries of former Soviet Union, Latin-America, Syria (high prevalence such as prev. &gt; 40/100 000, some only test &gt; 100/ 100 000)</li> <li>• &lt; 5 years and AS/R, but low threshold for all AS independent of age, especially if long journey, stay in communal housing</li> <li>• Symptomatic: persistent cough (&gt;2 weeks), unremitting cough, weight loss/failure to thrive, persistent (&gt;1 week) unexplained fever (&gt;38°C), persistent, unexplained lethargy or reduced playfulness: activity reported by the parent/caregiver, night sweats, Pneumonia not responding to Antibiotics, Gibbus, Meningitis, especially &lt; 1y of age,</li> <li>• Post exposure</li> <li>• Immuno-compromised, HIV pos., diabetes, chronic kidney disease</li> </ul>
<p><b>Hepatitis B</b> (HbsAg, anti-Hbc)</p> <ul style="list-style-type: none"> <li>• All AS/R;</li> <li>• Africa, Asia, Central/South-America and Eastern Europe; (country with &gt; 2% prevalence)</li> <li>• If fully vaccinated starting at birth, no need of systematic screening.</li> <li>• for infants/newborns: if mother has negative serology: no testing; history of sexual abuse or other RF or uncertain anamnesis in the absence of documented vaccination</li> </ul>
<p><b>Hepatitis C</b></p> <ul style="list-style-type: none"> <li>• countries with &gt; 2% prevalence: Russia, Ukraine, central Asia, Mongolia, Pakistan, Africa: particularly Egypt, Gabon, Burundi; West and central Africa, Tanzania, Eritrea, Mozambique, Madagascar, potentially Afghanistan, Papua New Guinea</li> <li>• for infants/newborns: if mother has negative serology: no testing;</li> <li>• history of sexual abuse, other RF (incl. operations/blood transfusions etc.)/uncertain history, low threshold for UMA</li> </ul>
<p><b>HIV 1 /2</b> (discuss risk and offer, only test if consent obtained)</p> <ul style="list-style-type: none"> <li>• Mother HIV +,</li> <li>• Clinical signs</li> <li>• Other risk factors: child separated from birth-mother, history of sexual abuse, history of blood product transfusion, unprotected sexual activity, &gt; 15 y, low threshold for UMA (esp. female as sexual abuse very frequent) or uncertain anamnesis etc.</li> <li>• Origin with increased risks (&gt;1%): Sub-Saharan Africa, Caribbean Central/South-America and Eastern Europe (Ukraine, Moldavia, Latvia, Russia..), central Asia, Thailand, Myanmar, PNG, Guiana, Surinam.</li> <li>• No general testing of children from high risk countries with known negative maternal serology and no RFs/exposure</li> </ul>
<p><b>Syphilis</b></p> <ul style="list-style-type: none"> <li>• Sexually active, history of sex. abuse, suspicion of congenital infection,</li> <li>• &lt;2 years and no information on maternal serologies (esp. if Sub Sahara Africa),</li> <li>• Low threshold for female UMA, UMA from Sub Sahara Africa</li> </ul>
<p><b>Chagas:</b></p> <ul style="list-style-type: none"> <li>• Offer serology if &gt;9Mte old from Latin America or mother from Latin America, esp. if with prolong stay in poor conditions (esp. Bolivia),</li> <li>• for newborns: if status of mother unknown or positive: direct exam and PCR in the first month of life (umbilical cord blood or peripheral blood) + serology at 9 months of age.</li> </ul>
<p><b>Strongyloides:</b> (Highest risks when walking barefoot/contact with human waste/sewage, farming in the tropics/subtropics/warm regions)</p> <ul style="list-style-type: none"> <li>• Eosinophilia</li> <li>• Sub-Saharan-Africa, South-East Asia</li> <li>• if likely to become immuno-compromised or immunocompromised (any origin)</li> </ul>
<p><b>Schistosoma</b> –Serology (+CCA in urine if suspected) <a href="https://www.who.int/data/gho/data/themes/topics/schistosomiasis">https://www.who.int/data/gho/data/themes/topics/schistosomiasis</a></p> <ul style="list-style-type: none"> <li>• all African and Middle Eastern countries; Brasil, Venezuela, Surinam</li> <li>• Southern China, Indonesia, the Philippines, the Laos and Cambodia,</li> <li>• NOT: Turkey, Iran, Afghanistan, Sri Lanka.</li> <li>• (especially, if bath in still or slow moving water)  → if positive or symptomatic: Stool/Urine test.</li> </ul> <p>Praziquantel is contra-indicated in patients with Neurocysticercosis: get specialist advice, especially if neurological complaints/ seizures are present!</p>
<p><b>Hepatitis A</b></p> <ul style="list-style-type: none"> <li>• Potentially search for immunity instead of vaccinating for patients from high prevalence countries, especially if from Afghanistan, Sub-Saharan Africa</li> <li>• If financially possible, vaccinate AS/R if non-immune (or at least before return)</li> <li>• vaccinate all children growing-up in Europe but with frequent travel to low/middle income country or frequent visitors of such origin</li> </ul>
<p><b>Malaria</b></p> <ul style="list-style-type: none"> <li>• rapid testing/smears if febrile + from endemic area</li> </ul>
<p><b>Newborn screening (Guthrie)</b></p> <ul style="list-style-type: none"> <li>• &lt; 2years and no newborn screening</li> </ul>

**Stool:**

In case of symptoms 2-3 stool samples SAF (protozoa) and native (helminthes) each is the gold standard.  
With Eosinophilia stool samples plus Strongyloides serology plus Helminthes-serology-panal (SwissTPH) should be considered.  
For asymptomatic pts a wait and see approach is – especially in case of low risk – adequate, with increased risk 1 stool SAF+native if origin out-side of Europe/US/Australia is possible;  
In case of family members/close contacts positive for feco-orally transmitted helminths, at least 1 stool sample SAF+native may be indicated.

*If vaccination catch-up strategy based on serology is chosen:*

**Tetanus-Titer up to 6 months after vaccine given (ideally 4-6 weeks after vaccine given)**

- $\geq 1000$  IU/l: no further tetanus immunization is needed
  - $\geq 500$  and  $<1000$  IU/L: single additional dose 6 months after the first one
  - $< 500$  IU/L: two further doses 2 and 6 months after the first one
- If vaccinated within last 6 months -> titer possible

**Anti-HBs-Titer ideally 4-8 weeks after vaccine given**

- If anti-HBs  $\geq 100$  IU/L immune, no further doses
- If anti-HBs 10-99 IU/L: give 1-2 more doses depending on age (0-10y: 2x Engerix 10;  $>11$  y: 1x Engerix 20 (if Hep A neg: ev 1 Twinrix + 1 Havrix after 6 months)
- If anti-HBs  $<10$  IU/L: complete vaccination and do HbsAg
- If no booster and  $> 10$  IU/L consider immune

**A full blood count is often helpful (Anaemia? Eosinophilia?) esp. Africa, Asia, poor nutrition, AS, clinical signs...**

**ALAT/ASAT, Creat may be added**

**In case of a history of unprotected sexual intercourse or of abuse, also consider the appropriate tests and potential referral**

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Our thanks go to all who, not part of the group, also gave inputs.

We attempt to adapt the list to changing evidence and epidemiology in the future. Indications can be seen as a help but not as fixed recommendations: adaptation to the individual patient's situation is necessary and the epidemiological risk profiles can vary substantially.  
The list is predominantly geared to help guide the care for minors with the perspective of staying in Switzerland for a while.

Indiziert	Untersuchungen	Kommentar
	BB diff	
	Ferritin	
	ASAT/ALAT/yGT/Bili	
	Harnstoff, Kreat	
	Urinstix	
	Serologien	
	Tetanus Titer (ca 4-6 Wochen nach Booster)	
	Hepatitis B: HbsAG, anti Hbc	
	Hepatitis B: Titer anti-Hbs	
	Hepatitis C	
	HIV	
	Syphilis	
	Chagas	
	Strongyloides	
	Schistosomen	
	IGRA	
	Malaria (rapid test/smears/dicker tropfen falls Fieber + Aufenthalt in Malaria-Region)	
	Clamydien /Gono /	
	Schwangerschaftstest	
	Neugeborenencreening Guthrie (falls $<7$ Mte und nicht gescreent)	
	Röntgenthorax	
	(Hinweis auf active TB)	
	Sonstiges:	
	Anmeldung Konsil:	