

Standing Orders for Administration and Interpretation of TB Skin Tests:

I. TB Skin Testing

A. Candidates for TB Screening:

1. Recent close contacts of active cases (i.e., within the past 24 months)
2. Persons known to have radiographic evidence suggestive of old, healed TB
3. Persons identified by immigration screening to have abnormal chest films suggestive of old or active TB (Class A/B)
4. Refugees
5. Other immigrants who have resided in the US for 5 years (i.e. 60 months) or less
6. Persons who have traveled to high-prevalence regions for ≥ 6 months during the preceding 5 years
7. Homeless persons
8. Persons who have injected illicit drugs
9. Persons seeking treatment for substance abuse
10. HIV infected persons
11. Organ transplant recipients
12. Persons with medical conditions that predispose to developing active disease if infected
 - a. Diabetes mellitus (especially insulin dependent or poorly controlled)
 - b. Chronic steroid therapy (e.g., equivalent of prednisone 15-20 mg per day for greater than one month)
 - c. Other immunosuppression (congenital immunodeficiency syndromes, HIV infection, or medically induced)
 - d. Cancer of the head/neck, lung, hematologic system (e.g., leukemia) or reticuloendothelial system (e.g., lymphoma)
 - e. End-stage renal disease (i.e., chronic hemodialysis and transplant candidates)
 - f. Malabsorptive states (e.g., small bowel resection, intestinal bypass, inflammatory bowel disease)
 - g. Less than 90% ideal body weight-for-height
 - h. Silicosis
13. Residents and employees of high-risk congregate settings (e.g., correctional facilities, homeless shelters, inpatient facilities)
14. Patients who are clinically well and are neither recent contacts to active TB, nor HIV-infected, nor refugees, nor class A/B immigrants may have TB screening deferred until arrival in their anticipated community of residence if they do not plan to reside in this jurisdiction for a period adequate to complete screening and treatment. More specifically...
 - a. Such clients planning to move out of the United States should be screened only if their current stay in the United States will exceed nine months.

B. TB Screening in Pregnancy

1. Pregnant women should not be screened unless the managing health care provider plans to treat them during pregnancy, if they are indeed found to have latent TB.

Consequently, screening during pregnancy should generally be limited to women who meet one or more of the following criteria:

- a. Contact with a pulmonary TB case within the preceding 24 months
- b. HIV infection
- c. Other medical conditions (listed above) that increase the risk for developing active TB
- d. Known radiographic abnormalities consistent with prior active TB (including class A/B immigrants)
- e. Refugees and immigrants who have arrived within the preceding 24 months from high-risk regions of the globe
- f. Tuberculin skin-test converters

If PPD positive, pregnant women in this group (these groups?) should undergo a PA chest radiograph with abdominal shielding, regardless of the stage of pregnancy.

2. Pregnant women who lack all of the factors described immediately above may have skin testing deferred until the post-partum medical evaluation.

3. In the event such screening does occur in such a “lower-priority” pregnant woman who is asymptomatic and she is found to have a positive skin test (e.g., $\geq 10\text{mm}$), a posteroanterior chest radiograph (with abdominal shield) should be obtained *after the first trimester* to assess for evidence of active pulmonary disease. If the radiograph is normal or shows only calcified granulomata, treatment should be deferred until 4-6 weeks after delivery. At that time a repeat chest radiograph should be obtained and reviewed prior to starting treatment for latent TB.

C. Standing Orders for Administration and Interpretation of TB Skin Tests:

1. Administer Purified Protein Derivative (PPD) 5 units (0.1 ml) intradermally in the left lateral forearm.
2. Alternative sites include the right lateral forearm or the posterior aspect of either trapezius muscle.
3. Skin tests should not be administered on a day that will cause the 48-72 hour reading date to fall on a weekend or holiday unless a specific plan has been established to permit a reliable reading.
4. Interpretation:

Skin tests should be read by a clinician at 48-72 hours after administration with the result

recorded in double digits (e.g., 07 mm).

a. Skin tests may be read up to 96 hours under the following limited circumstances:

a. Reasonable efforts to read by 72 hours have failed.

b. The observed result is clearly 00 mm induration without any erythema or is clearly 10 mm induration or greater.

d. Classification of the skin-test result is pursuant to CDC guidelines as set forth in *Appendix A*.

e. A skin test conversion is defined as the following: a documented increase of 10 mm induration (or greater) over the preceding 24 months (e.g., 08--- $\geq$ 18 mm or 00--- $\geq$ 10 mm). Such persons should be considered “PPD-positive,” regardless of their placement in the risk matrix cited above.

f. Persons entering a serial TB skin testing program should undergo two-step testing at baseline. Specifically, if the initial result is negative AND no documented result from the preceding 12 months is available, a second PPD should be applied 1-3 weeks after the first. This second step should be interpreted using the same criteria as the first. For instance, if the first step is 08 mm and the second step is 16 mm, the second test is interpreted as “positive” (even though it is not a 10 mm increase).

APPENDIX A

INTERPRETATION OF TB SKIN TEST AS “POSITIVE”

≥05 mm

Clinical suspicion of active TB
Radiographic evidence of currently active
or old-inactive TB
Immunosuppressed states
♦ HIV infection
♦ Solid organ or bone marrow transplant
♦ Other (e.g., ≥15-20 mg prednisone
equivalents per day for ≥3 weeks,
cancer chemotherapy, etc.)
Close contacts of active pulmonary TB

≥10 mm

Children <4 years

Other children <18 years regularly exposed
to high risk adults

Medical conditions predisposing to
reactivation:

- Diabetes mellitus
- End stage renal disease
- Hematologic and reticuloendothelial malignancies
- Lung, head, or neck cancers
- Malabsorptive states (e.g., partial/total gastrectomy, intestinal bypass, inflammatory bowel disease)
- ≤90% of ideal body weight
- Other evidence of malnutrition
- History of drug injection

Staff, volunteers, or residents in

- ♦ Acute or long-term care facilities
- ♦ Adult correctional facilities
- ♦ Homeless shelters

Foreign born persons from the following

high risk countries*

*Includes any countries in Africa, Asia, Central or South America, most of the Caribbean and Pacific Islands, as well as Afghanistan, Albania, Armenia, Azerbaijan, Bosnia & Herzegovina, Bulgaria, Croatia, Djibouti, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lebanon, Lithuania, Poland, Portugal, Mexico, Moldova, Qatar, Romania, Slovakia, Slovenia, Spain, Syria, Tajikistan, Macedonia, Turkey, Turkmenistan, Uzbekistan, West Bank and Gaza, Yemen, Yugoslavia (i.e., most countries where rates exceed 20/100K)

≥15 mm

Persons with none of the risk factors to the left. Includes:

- ◆ Recent immigrants from nations not listed in footnote below (e.g., Canada, Western Europe, Russia, Ukraine, Belarus, Australia, New Zealand, and some Caribbean and Pacific Islands)
- ◆ Persons entering treatment for alcohol and other non-injection drug use

This policy and procedure shall remain in effect for all patients of the ARCH site until rescinded or until _____ (date).

Medical Director's signature: _____ Effective date: _____.