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# PPD Guidelines



## PPD

Albany Medical College endorses the standards of the Accreditation Council for Continuing Medical Education (ACCME) and the guidelines of the Association of American Medical Colleges (AAMC) that the sponsors of continuing medical education activities, speakers and **planning committee members** of these activities disclose relationships with ineligible companies. An ineligible company is any entity whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients. Relationships include but are not limited to receiving from an ineligible company: research grants, consultancies, honoraria and travel, or other benefits or have a self-managed equity interest in a company.

Albany Medical College has implemented a mechanism to identify and mitigate all conflicts of interest prior to the educational activity being delivered to learners

**The following Relationships Exist: None**

**The following faculty and planning committee members have stated that they do not have any relationships to disclose.** Jacqueline Weaver, MD and Jennifer Price.

**All relevant financial relationships have been mitigated.  
We have not received any commercial support for this activity**



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## PPD

At the conclusion of this activity you will be able to:

1. Properly conduct a PPD test..
2. Identify the equipment necessary to conduct a PPD test.
3. Properly read the results of a PPD test.

The information being presented will be scientifically valid. The content of the presentations will promote improvements or quality in healthcare and not a specific proprietary business interest of ineligible company. All presentations will give a balanced view of therapeutic options.



## PPD

Albany Medical College is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The Albany Medical College designates this Live activity for a maximum of *.50 AMA PRA Category 1 Credit(s)™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



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## PPD

- Test for exposure/infection with Tuberculosis
- Mostly a test for healthcare providers, hospital employees, nursing home residents and occupation reasons
- Sometimes may have patient's self pay due to exposure or for school requirements

## How to Place

- Using a TB syringe draw up 0.1ml of Mantoux solution
- Place subcutaneously on the forearm at least 2 inches away from the elbow or wrist. Needle bevel facing upward and insert at 5–15-degree angle.
- Small wheal should be formed; if wheal is not formed then another placement should be done immediately at least 5cm away from initial site and mark the 2<sup>nd</sup> location for reading purposes
- Area should be kept uncovered (no band aids) and clean (no lotions or ointments) and avoid scratching or rubbing
- Patient must return in 48-72 hours for read, if outside of this window read is not accurate

## How to Read

- Feel the area of skin where injection was placed
- If no induration is felt, then negative
- If induration is felt, then mark the edges and measure perpendicular (horizontal across forearm) to the forearm with a ruler to determine the size of induration

## Guidelines for Induration

### Classification of the Tuberculin Skin Test Reaction

**An induration of 5 or more millimeters** is considered positive in-

- People living with HIV
- A recent contact of a person with infectious TB disease
  - People with chest x-ray findings suggestive of previous TB disease
- People with organ transplants
- Other immunosuppressed people (e.g., patients on prolonged therapy with corticosteroids equivalent to/greater than 15 mg per day of prednisone or those taking TNF-a antagonists)

**An induration of 10 or more millimeters** is considered positive in-

- People born in countries where TB disease is common, including Mexico, the Philippines, Vietnam, India, China, Haiti, and Guatemala, or other countries with high rates of TB
- People who abuse drugs
- Mycobacteriology laboratory workers
- People who live or work in high-risk congregate settings (e.g., nursing homes, homeless shelters, or correctional facilities)
- People with certain medical conditions that place them at high risk for TB (e.g., silicosis, diabetes mellitus, severe kidney disease, certain types of cancer, and certain intestinal conditions)
- People with a low body weight (<90% of ideal body weight)
- Children younger than 5 years of age
- Infants, children, and adolescents exposed to adults in high-risk categories

**An induration of 15 or more millimeters** is considered positive in

- People with no known risk factors for TB



## False Positive and False Negative

- False Positive
  - Previous TB vaccination with the bacille Calmette-Guérin (BCG) vaccine
  - Infection with nontuberculosis mycobacteria (mycobacteria other than *M. tuberculosis*)
  - Incorrect measurement or interpretation of reaction
  - Incorrect antigen used
- False Negative
  - Anergy
  - Recent TB infection (within the past 8 to 10 weeks)
  - Very young age (younger than 6 months)
  - Recent live-virus measles or smallpox vaccination
  - Incorrect method of giving the TST
  - Incorrect measuring or interpretation of TST reaction

## What if Patient Comes After 72 Hours

- Per CDC
  - In general, there is no risk associated with repeated tuberculin skin test placements. If a person does not return within 48-72 hours for a tuberculin skin test reading, a second test can be placed as soon as possible. There is no contraindication to repeating the TST, unless a previous TST was associated with a severe reaction.
- Per Stat Pearls on NCBI
  - The second test can be administered as soon as possible. However, if repeated, the test should preferably be performed within 7 days of the initial test to avoid boosting effect. Also, the second test site should be on a different body location, such as the other arm.

## Positive PPD

- New Positive
  - CXR should be completed to determine active TB and read by MD immediately
  - If CXR negative patient cleared for work
  - They should then be referred to DOH for further work up and treatment
  - Give copy of CXR
  -

## Patient Reports Positive PPD's in Past

- If patient reports positive PPD in past further PPD's are not required
- If patient is unable to provide report of previous CXR then CXR should be completed
  - Per OSHA initial CXR screening with further TB screening questions is sufficient however this is usually not the case for employers who require CXR every 3-5 years.
- If they bring a radiology read and are not required by employer to have new CXR then have them complete the TB screening form (newly created)
  - If they answer yes to any question repeat CXR
- If they have not had one done in this timeframe a new CXR should be ordered and read by MD at time of visit to clear for active infection
- If patient has never had full work up by DOH from initial positive PPD in past then patient should be referred to DOH for work up

## BCG Vaccine History

- History of BCG vaccine is not an immediate contraindication for PPD placement
- If patient has never had one placed before then a PPD should be placed
- Not every person with history of vaccine will react on a PPD test
- Through DOH or patients PCP may use IGRA test as this is not altered by previous immunization

## Two Step PPD

- Completed as the first PPD may give false negative results if patient was exposed years ago or has never had PPD done
- Placement of 1<sup>st</sup> test with read in 48-72 hours
- 2<sup>nd</sup> test placement occurs **1-5 weeks after the first test reading date** for accurate results