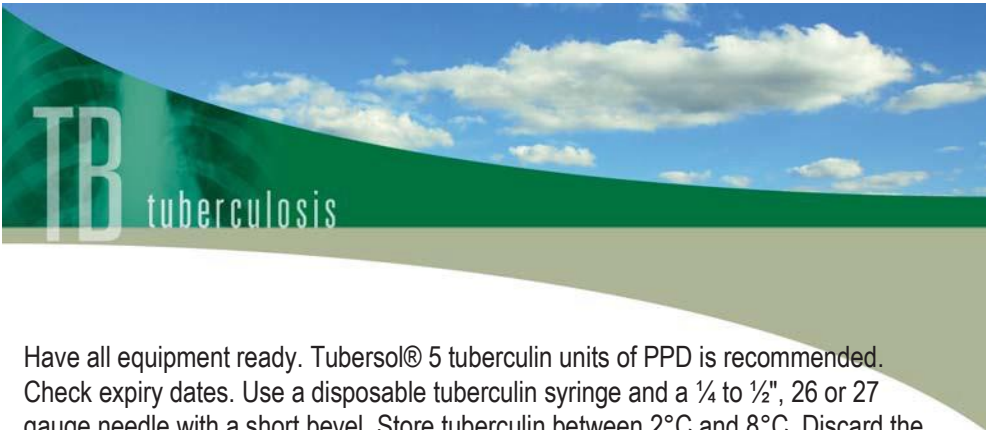
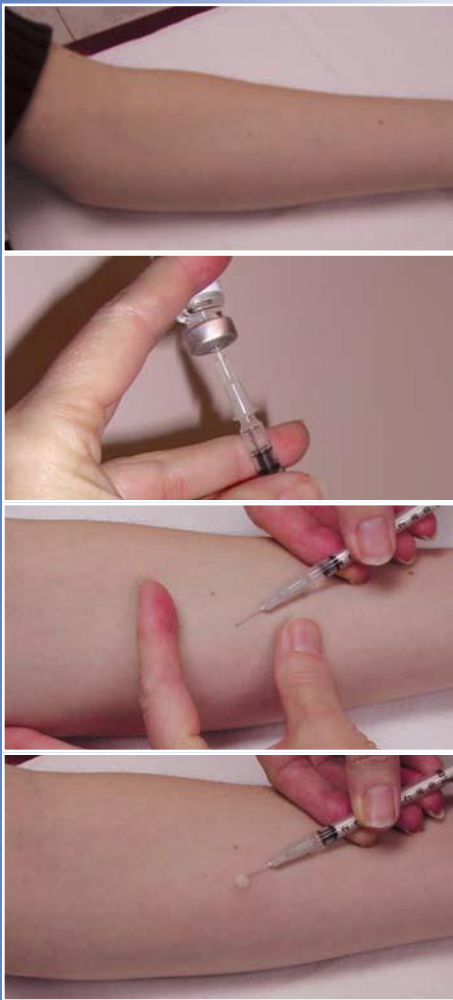


# step-by-step guide to mantoux testing



Have all equipment ready. Tubersol® 5 tuberculin units of PPD is recommended. Check expiry dates. Use a disposable tuberculin syringe and a ¼ to ½", 26 or 27 gauge needle with a short bevel. Store tuberculin between 2°C and 8°C. Discard the solution within 1 month of opening, or if it has been exposed to freezing.

## DAY 1



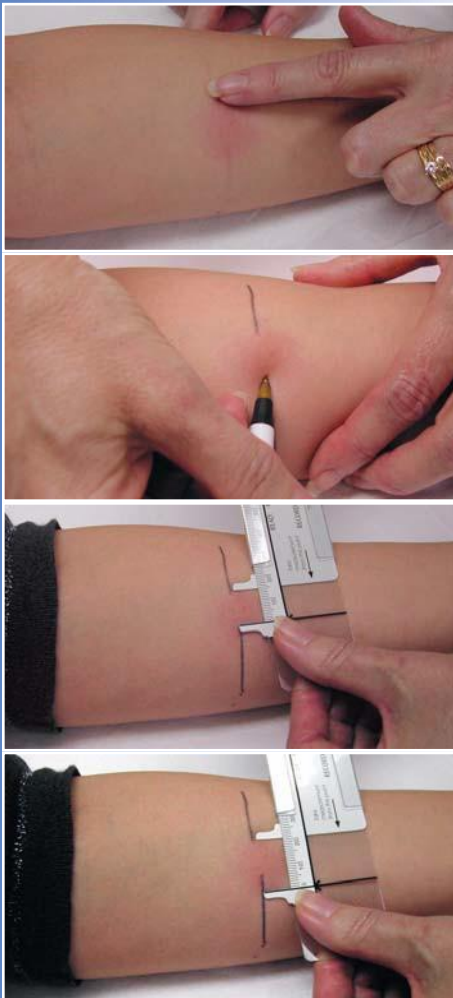
Seat the client comfortably. Rest the client's arm on a firm, well-lit surface. Make sure there is a slight bend at the elbow and the arm rests palm up. Clean the injection site with an alcohol pad and let dry. Avoid areas of damaged or broken skin, swelling, rash, or visible veins. If neither forearm is suitable, use the outside of the forearm or the upper arm.

Do not inject air into the vial when doses are being drawn. Draw up a little more than 0.1 ml using aseptic conditions. Hold the syringe upright and tap it lightly to remove air, then expel one drop. Check that a full 0.1 ml remains in the syringe.

Injection site is on the inside surface of the forearm, about 10 cm (4") below the elbow. Stretch the skin taut with your free hand. Hold the syringe almost parallel (5-15° angle) to the skin. Insert the needle, bevel up, so that the tip of the needle is visible just below the surface of the skin. The entire bevel should be covered. Release the skin and slowly inject 0.1mL of tuberculin. You will feel a slight resistance.

A firm, pale wheal 6-10 mm in diameter should appear immediately. If a lot of the fluid leaks out onto the skin or no wheal appears, administer a second injection on the other arm or at least 5-10cm (2") from the first site. Document the location of the second site. It is normal for a drop of blood to appear when the needle is removed. Advise the client to dab the spot gently to remove the blood. Do not press on the site as it could squeeze out the tuberculin and ruin the test. Do not cover with a bandage.

## DAY 2



The test is read 48 to 72 hours after being administered. Make sure the client's forearm is slightly flexed at the elbow. Check for induration (hardness) by inspecting the arm from a side view against the light as well as by direct light, and by palpating the arm with a gentle stroke of the finger.

If induration (not blistering) is present, the transverse diameter, to the long axis of the forearm is measured. Sometimes the precise edge of induration is difficult to palpate. Push the tip of a ballpoint pen at a 45° angle toward the site of the injection. The tip will stop at the edge of the induration.

Measure the size of induration between the pen points with a caliper or flexible ruler. Record the size of induration in millimetres. If the measurement falls between demarcations on the ruler, record the smaller of the two numbers. If the client has no induration, record the result as 0 mm. Provide a record to the client.

Erythema or redness is not measured. The development of erythema does not indicate infection. A tuberculin reaction (induration) of 10 mm or more is classified as positive for all individuals.

For more information  
on Tuberculosis and  
the Mantoux test call  
the Windsor-Essex  
County Health Unit at  
519-258-2146,  
ext.1420 or visit  
[www.wechu.org](http://www.wechu.org)

