PURPOSE:
To introduce medication through epidermis into dermis.

CONSIDERATIONS:
1. The intradermal technique is used to inject small amounts (0.01-0.1 mL) of fluid for diagnostic purposes, usually to determine sensitivity to various substances.
2. Ventral forearm surface is usual site. Commonly used skin antigens are histoplasmin and tuberculin purified protein derivative.
3. Prior to tuberculin (TB) testing, obtain a negative history for mantoux reaction, BCG immunization or symptoms of active TB. Immunocompromised patients may have a negative TB purified protein derivative (PPD) test, yet have active TB infection.
4. A TB test is administered by Mantoux technique, that is, the intradermal injection of PPD.
5. Allergy skin testing is usually not done in the home.
6. For intradermal injections, select a 25- to 27-gauge needle with a short bevel. The needle length can be 3/8-5/8 inches.
7. Use at least 2 patient identifiers prior to administering medications.

EQUIPMENT:
Medication
1 mL tuberculin syringe (25- to 27-gauge needle, 1/2-7/8 inches)
Alcohol prep pad
Puncture-proof container
Gloves

PROCEDURE:
1. Adhere to Standard Precautions.
2. Identify patient and explain procedure.
3. Verify medication to be given and assemble equipment.
4. Find antecubital space, then measure 3-4 finger widths distal from antecubital space toward hand for injection site on ventral aspect of the forearm.
5. Cleanse site with alcohol prep pad by starting at the center and moving outward in a circular motion. DO NOT rub area too hard; rubbing may cause irritation that could hinder reading of the test. Allow alcohol to dry.
6. Stretch skin slightly with thumb, hold patient's forearm in one hand and with other hand hold syringe between thumb and forefinger.
7. Place the syringe so the needle is almost flat against the skin, making sure the bevel of the needle is up.
8. Insert the needle (at a 15-degree angle) to 1/8 inch below the skin surface and point of needle is still visible through skin.
9. Inject medication slowly. If using PPD tuberculin, use 0.1 mL. Expect resistance, which means needle is properly placed. If needle moves freely, the needle has been inserted too deeply. Withdraw needle slightly and try again. While medication is being injected a small white blister, wheal, or bleb should be forming (about 6 mm to 10 mm in diameter).
10. Withdraw needle and apply gentle pressure to site. DO NOT massage site as it may interfere with test result.
11. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Read test at appropriate time according to medication instructions.
2. Reading PPD skin test:
   a. The skin test is usually read 48 to 72 hours after injection.
   b. The induration (hardened tissue) only is significant. Erythema (redness) without induration is not significant. The tuberculin skin test is measured crosswise to the axis of the forearm.
   c. Only the induration should be measured. A TB skin test with erythema but no induration is non-reactive.
   d. A TB skin test is recorded in millimeters (mm), not positive or negative. A TB skin test with no induration is recorded as 00 mm.
3. The Centers for Disease Control and Prevention (CDC) support the following classification of the TB reaction:
   a. A TB reaction of 5 mm or more is considered positive in the following groups: (1) Persons who have had a close, recent contact with a patient with infectious TB. (2) Persons who have a chest X-ray with lesions characteristic of an old healed TB lesion. (3) Persons who have a known human immunodeficiency virus (HIV) or are at risk for HIV.
   b. A tuberculin reaction of 10 mm or more is considered positive for those who did not meet the preceding criteria but may have other risk factors for TB such as: (1) Intravenous drug users. (2) Residents in long term care facilities. (3) Persons with poor access to healthcare. (4) Persons with multiple medical problems that may increase the risk of TB once infection is present. (5) Foreign-born persons coming from countries with a high prevalence of TB.
4. Document in patient's record:
   a. Medication administered, dose, time, route and site.
   b. Results of test.
   c. Instructions given to patient/caregiver.
   d. Communication with physician, as needed.