

**QTP 4N0X1-11  
October 2014**

**ALLERGY  
QUALIFICATION TRAINING PACKAGES  
(SEI 453/Allergy Technician)**



Enlisted Air Force Allergy & Immunization Consultant  
Air Force Medical Support Agency (AFMSA)  
3515 S. General McMullen, Suite 1023  
San Antonio, TX 78226

## *Volume 11: Allergy Specialty*

### **TABLE OF CONTENTS**

<b><u>MODULE</u></b>	<b><u>OBJECTIVE</u></b>	<b><u>PAGES</u></b>
1	<i>Principles of Allergy</i>	4 - 5
2	<i>Type 1 hypersensitivity skin testing; intradermal and prick</i>	6 - 8
3	<i>Pulmonary function testing</i>	9 - 12
4	<i>Administration and management of immunotherapy injections</i>	13 - 15
5	<i>Mixing of serial 10 fold dilutions</i>	16 - 18
6	<i>Administer/Read Delayed Skin Tests</i>	19 - 21

## ***INTRODUCTION***

1. These qualification-training packages (QTPs) were developed to enhance on-the-job training (OJT) for Allergy/Immunology technicians (SEI 453). They provide for you, as a trainer, the breakdown of tasks into teachable elements. This will help you guide the trainee toward gaining enough proficiency to perform the tasks. They will also aid task certifiers when it becomes necessary to evaluate trainees for task certification.
2. As a trainer, go through each module and identify which QTPs are needed for the trainee's job position. You also have the flexibility to arrange training for each module in the order you decide. Review the different tasks related to the subject area in each module with the trainee. Direct the trainee to review the training references to better understand the objective of each module. If the trainee has any questions about the objective, clarify what is expected based on the objective of the module. Go through the performance checklist with the trainee and allow enough time to learn each step (some objectives may take longer to teach). Remember, the objective of each QTP is to allow sufficient time for the trainee to learn each task thoroughly. When the trainee receives enough training and is ready to be evaluated on an objective, follow the evaluation instructions. Use the performance checklist as you evaluate each objective. If the trainee successfully accomplishes the objective, document appropriately in the Air Force Training Record (AFTR). If the trainee does not accomplish the objective, go over the areas needing more training until the objective is met. Conduct a feedback with the trainee on each module. Once you, as the trainer, have ensured that the trainee is qualified to perform the task, a certifier will then evaluate him/her.
3. The goal of the developers of each QTP is to publish a usable document for trainers and trainees that will benefit the CFETP concept of training throughout your career. We value your expertise in meeting this goal. If you find discrepancies in a QTP, or if you have suggestions for improvement or additional QTP development, please let us know about them.
4. Direct all inquiries to:

Enlisted Air Force Allergy & Immunization Consultant  
Air Force Medical Support Agency (AFMSA)  
3515 S. General McMullen, Suite 1023  
San Antonio, TX 78226  
DSN: 969-9091 Comm: 210-395-9091  
<https://kx2.afms.mil/kj/kx8/AllergyImmunization/>

***PRINCIPLES OF ALLERGIES***

<b>SUBJECT AREA:</b>	<b>4.6.1.</b> Principles Of Allergies. <b>4.7.</b> Pollen Agents. <b>4.8.</b> Principles Of Patient Presentation.
<b>TASK(s):</b>	Principles Of Allergies.
<b>CFETP/STS REFERENCE(s):</b>	<b>4.6.1., 4.7, 4.8.</b>
<b>EQUIPMENT REQUIRED:</b>	None.
<b>TRAINING REFERENCE(s):</b>	Allergic Diseases Diagnostic and Management; Allergy Principles and Practice, Volumes I and II; Immunology-Allergy Specialty Course Manual.
<b>REMARKS/NOTES:</b>	Review knowledge area with the Allergy technician and provide them with the current training references.
<b>OBJECTIVE:</b>	The trainee must provide the trainer with the required information.

**EVALUATION INSTRUCTIONS:**

1. After the trainee has received instruction, allow sufficient review of applicable references.
2. Use the performance checklist to ensure all steps of the task are accomplished.
3. Document completion of the evaluation in the trainee's AFTR (AF 623a). Initial evaluation should be documented in the CFETP, Allergy/Immunology STS, attachment 4, 25 June 2014. All recurring annual evaluations should be documented on AF Form 1098 and AF 623a.

PERFORMANCE ITEM	SAT	UNSAT
1. Differentiate and convey understanding of Class I and Class IV hypersensitivity reactions on the Gell and Combs scale: a. Class I, immediate reaction b. Class IV, cell mediated		
2. Demonstrate the ability to identify Class II and Class III allergic reactions on the Gell and Combs scale: a. Class II, cytotoxic b. Class III, immune complex reaction		
3. Identify the types of aeroallergens.		
4. Identify the pollinating seasons of specific allergy-causing pollens. (i.e. mountain cedar pollinates in winter). REF: Chap 18 WRAMC Manual		
5. Identify signs and symptoms and convey the understanding of specific patient presentations: a. Rhinitis: 1. Seasonal 2. Perennial 3. Sinusitis b. Stinging insect hypersensitivity c. Anaphylaxis d. Food allergies e. Medication/vaccine hypersensitivity f. Irritants and physical agents g. Dermatological manifestations of allergy: 1. Urticaria 2. Angioedema h. Asthma		
<b>FINAL RESULT:</b>		

**FEEDBACK:** Use this checklist as a source of information. Discuss/document the trainee's performance, indicating strengths, weaknesses, and suggested improvements in the members' AFTR on AF 623a.

\_\_\_\_\_  
Print Trainee Name

\_\_\_\_\_  
Print Trainers Name

\_\_\_\_\_  
Signature of Trainee & date

\_\_\_\_\_  
Signature of Trainer & date

***TYPE 1 HYPERSENSITIVITY SKIN TESTING***

<b>SUBJECT AREA:</b>	<b>4.9.</b> Diagnostic Procedures.
<b>TASK(s):</b>	Type I Hypersensitivity Skin Testing. (intradermal and prick skin testing)
<b>CFETP/STS REFERENCE(s):</b>	<b>4.9.</b>
<b>EQUIPMENT REQUIRED:</b>	2x2 gauze pads, alcohol pads, skin testing device(s), skin marker, skin test ruler, antigens being tested, gloves ( and sharps container.
<b>TRAINING REFERENCE(s):</b>	Allergy Diagnostic Testing: An Updated Practice Parameter. <i>The American Academy of Allergy, Asthma and Immunology (AAAAI), The American College of Allergy, Asthma and Immunology (ACAAI)</i> , Walter Reed Army Medical Center Immunology-Allergy Specialty Course Manual.
<b>REMARKS/NOTES:</b>	Review steps of the process one-on-one with medical technician.
<b>OBJECTIVE:</b>	The trainee must successfully demonstrate the performance of Type I Hypersensitivity Skin Testing (intradermal and prick skin testing).

**EVALUATION INSTRUCTIONS:**

1. After the trainee has received instruction, allow sufficient practice on each part of the task.

<ol style="list-style-type: none"> <li>2. The evaluator will <b>STOP</b> the procedure immediately and correct the trainee if performance could become detrimental to patient safety at any time.</li> </ol>
--

3. Use the performance checklist to ensure all steps of the task are accomplished.
4. Document completion of the evaluation in the trainee's AFTR (AF 623a). Initial evaluation should be documented in the CFETP, Allergy/Immunology STS, attachment 4, 25 June 2014. All recurring annual evaluations should be documented on AF Form 1098 and AF 623a.

PERFORMANCE ITEM	SAT	UNSAT
<b>PRICK SKIN TESTING</b>		
1. Verify order for skin testing.		
2. Interview patient: <ul style="list-style-type: none"> <li>a. Currently taking any medications? Any antihistamines in the past 72 hours? (<b>Note:</b> some allergy medications may require up to 4 weeks to clear the system)</li> <li>b. Is patient currently on a beta-blocker?</li> <li>c. Females: Is there a possibility of pregnancy?</li> <li>d. Does patient have any chronic medical conditions?</li> <li>e. Obtain written informed consent to perform ordered skin test</li> <li>f. Educate patient on signs and symptoms of anaphylaxis, as well as treatment course for anaphylaxis</li> </ul>		
3. Explain procedure to patient.		
4. Wash hands.		
5. Prep selected test site with alcohol and allow area to dry.		
6. Using skin marker, create a grid appropriate to the number of tests being performed (minimum of 3 cm; not within 5cm of wrist or 3cm of antecubital fossae).		
7. Place antigens on the appropriate test site.		
8. Dab excess antigen from test sites, ensuring not to cross-contaminate.		
9. Monitor patient for 15 minutes.		
10. Grade the wheal and flare IAW the regional criteria grading system.		
11. Accurately document.		
12. Clean test area of excess antigen/skin test marker.		
13. Inform patient of the potential for delayed systemic reactions and educate patient on appropriate medical interventions and attention to seek.		
14. Give Provider test results.		

<b>INTRADERMAL SKIN TESTING</b>		
1. Verify physician has ordered intradermal skin testing.		
2. Interview patient: <ul style="list-style-type: none"> <li>a. Currently taking any medications? Any antihistamines in the past 72 hours? (<b>Note:</b> some allergy medications may require up to 4 weeks to clear the system)</li> <li>b. Is patient currently on a beta-blocker?</li> <li>c. Females: Is there a possibility of pregnancy?</li> <li>d. Does patient have any chronic medical conditions?</li> <li>e. Obtain written informed consent to perform ordered skin test</li> <li>f. Educate patient on signs and symptoms of anaphylaxis, as well as treatment course for anaphylaxis</li> </ul>		
3. Explain procedure to patient.		
4. Prep selected test site with alcohol and allow drying.		

<b>PERFORMANCE ITEM</b>	<b>SAT</b>	<b>UNSAT</b>
1. Using skin marker, create a grid appropriate to the number of tests being performed (minimum 3 cm apart).		
2. Inject approximately 0.02 mL of the antigen creating a 2 mm bleb at each site.		
3. Monitor patient for 15 minutes. Report any positive reactions to the provider. Do not proceed unless provider tells you to. In cases of negative reactions, proceed to the next stage of testing.		
4. Grade the wheal and flare IAW the regional criteria grading system.		
5. Accurately document.		
6. Clean test area of excess antigen/skin test marker.		
7. Inform patient of the potential for delayed systemic reactions and educate patient on appropriate medical interventions and attention to seek.		
8. Give provider test results.		
<b>FINAL RESULT:</b>		

**FEEDBACK:** Use this checklist as a source of information. Discuss/document the trainee's performance, indicating strengths, weaknesses, and suggested improvements in the members' AFTR on AF 623a.

\_\_\_\_\_  
Print Trainee Name

\_\_\_\_\_  
Print Trainers Name

\_\_\_\_\_  
Signature of Trainee & date

\_\_\_\_\_  
Signature of Trainer & date

***PERFORM ROUTINE SPIROMETRY***

- SUBJECT AREA:** 4.10. Perform Specialized Testing.
- TASK(s):** Perform routine spirometry/flow volume loops, perform pre- and post-bronchodilator studies, educate and document peak flows.
- CFETP/STS REFERENCE(s):** 4.10.7., 4.10.8., 4.10.10., 4.11.
- EQUIPMENT REQUIRED:** Spirometer, hand-held updraft nebulizer, peak flow meter, medication as needed.
- TRAINING REFERENCE(s):** Walter Reed Army Medical Center Immunology-Allergy Specialty Course Manual, The American Academy of Allergy, Asthma and Immunology.
- REMARKS/NOTES:** Review steps of the process one-on-one with the 453 SEI and/or nursing personnel trained performing routine spirometry.
- OBJECTIVE:** The trainee must successfully demonstrate the performance of spirometry testing procedures.

**EVALUATION INSTRUCTIONS:**

1. After the trainee has received instruction, allow sufficient practice on each part of the task.
2. The evaluator will **STOP** the procedure immediately and correct the trainee if performance could become detrimental to patient safety at any time.
3. Use the performance checklist to ensure all steps of the task are accomplished.
4. Document task competency upon completion of the evaluation in the trainee's AFTR. Initial evaluation should be documented in the CFETP. All recurring evaluations should be documented on AF Form 1098.

PERFORMANCE ITEM	SAT	UNSAT
1. Differentiate and convey understanding of spirometry terms. <ol style="list-style-type: none"> <li>a. Vital Capacity (VC)</li> <li>b. Forced Vital Capacity (FVC)</li> <li>c. Forced Vital Capacity in One Second (FVC1)</li> <li>d. Peak flow (PF)</li> <li>e. Mid-maximal Expiratory Flow Rate (MMEF)<sup>3</sup></li> <li>f. Volume Time Graph</li> <li>g. Flow Volume Curve</li> <li>h. Inspiratory Volume Curve</li> </ol>		
2. Determine factors that provide predicted values: <ol style="list-style-type: none"> <li>a. Expected values (FVC, FEV, and MMEF) vary directly related to the age, height, sex and race of a patient. Calculation of these factors will determine <i>percent predicted</i></li> <li>b. Results within 20% of the predicted normal values are usually considered within normal limits</li> </ol>		
1. Identify patient.		
2. Gather supplies/equipment based on task.		
3. Calibrate and/or verify calibration of machine is current.		
4. Wash hands.		
5. Verify patient data: <ol style="list-style-type: none"> <li>a. Patient's name</li> <li>b. Identification number/FMP and SSN</li> <li>c. Height</li> <li>d. Weight</li> <li>e. Race</li> <li>f. Sex</li> <li>g. Date of birth</li> </ol>		
PATIENT SCREENING		
1. Before administering the test, find out if your patient has smoked, eaten, or has had recently had a respiratory tract infection.		
2. If the patient has a history of smoking, ask the number of packs smoked per day and how long they have smoked.		
3. At least 1 hour must have passed since the examinee has either has smoked or administered a bronchodilator and at least 2 hours since their last meal.		
4. If the examinee is acutely ill or experienced an upper or lower respiratory tract infection during the previous three weeks, postpone the test.		
5. Explain procedure to patient.		
6. Zero sensor.		
7. Document if test is performed in sitting or standing position. Have patient perform tests until local criteria has been met. Coach patient during procedure to receive maximum effort. Consider the following during the spirometry effort:		
8. a. Is air escaping from their nose? b. Is mouthpiece positioned correctly? c. Does patient appear to be providing maximum effort?		

9. Verify proper spirometry efforts have been made and print results for provider interpretation. <i>Review FVC and PF absolute and percent predicted values:</i> <ol style="list-style-type: none"> <li>a. <i>Ensure absolute values within 20% of predicted values</i></li> <li>b. <i>If FVC larger % predicted than PF; patient effort not sufficient</i></li> <li>c. <i>If FVC lower % predicted than the PF; patient's exhalation effort not complete</i></li> <li>d. <i>Perform second test and compare it to the first</i></li> <li>e. <i>If effort greater than 5% difference, perform additional efforts</i></li> <li>f. <i>3 good efforts are required (exception if patient is distressed, and each additional effort is poorer). For example, distressed asthmatics/some asthmatics with hyper reactive airways.</i></li> </ol>		
<b>PRE- AND POST-BRONCHODILATOR STUDIES</b>		
1. Verify physician's order for study.		
2. Verify physician's order for bronchodilator.		
3. Perform baseline spirometry.		
4. Administer bronchodilator agent by nebulizer/inhaler.		
5. Wait 15-20 minutes (Per local protocol).		
6. Select post-bronchodilator testing.		
7. Enter the name of the bronchodilator used.		
8. Perform and save three good tests.		
9. Print results.		
<b>PERFORM PEAK FLOWMETER STUDIES</b>		
1. Verify physician's order.		
2. Move the marker to 0 or to the lowest number on the scale.		
3. Have patient stand or sit up straight.		
4. Instruct the patient to take as deep a breath as possible.		
5. Have patient close lips tightly around the mouthpiece.		
6. Instruct patient to ensure their lips and tongue does not block the mouthpiece.		
7. Have the patient blow out as hard and as fast as possible.		
8. Take the meter out of the patient's mouth and locate the marker.		
9. Write down the number that the marker is pointing to.		
10. Repeat steps 2 through 8 two more times.		
<b>INHALED MEDICATION VIA UPDRAFT NEBULIZER</b>		
1. Verify physician's order using 6 rights.		
2. Obtain supplies and medication, check for expiration date, discoloration and calculate dosage.		
3. Identify patient/explain procedure.		
4. Wash hands and don gloves.		
5. Prepare updraft and nebulizer for treatment.		
6. Verify the 6 rights again.		
7. Confirm patient is not allergic to medication.		
8. Position patient in upright position.		
9. Measure and record patient's baseline vital signs, to include peak flow.		
10. Turn on oxygen or compressed air flow to nebulizer.		

11. Adjust flow to obtain a steady mist (4 to 6 LPM).		
12. Instruct patient to hold nebulizer upright and place their mouth over the mouthpiece.		
13. Instruct patient to inhale and exhale slowly and deeply through their mouth until all medication has been administered.		
14. Observe patient for adverse effects during treatment (discontinue and notify nurse or physician immediately if pulse increases more than 20 bpm).		
15. After treatment is complete, turn off oxygen/compressed air unit.		
16. Measure and record patient's vital signs, to include peak flow.		
17. Dispose of supplies properly.		
18. Document procedure.		
<b>FINAL RESULT:</b>		

**FEEDBACK:** Using this checklist as a source of information, discuss the trainee's performance indicating strengths, weaknesses, suggested improvements, etc. If the trainee performed all steps of the task satisfactorily, document the results in the trainee's OJT record.

\_\_\_\_\_  
Print Trainee Name

\_\_\_\_\_  
Print Trainers Name

\_\_\_\_\_  
Signature of Trainee & date

\_\_\_\_\_  
Signature of Trainer & date

***ADMINISTRATION AND MANAGEMENT OF  
IMMUNOTHERAPY INJECTIONS***

<b>SUBJECT AREA:</b>	<b>4.14.</b> Immunotherapy.
<b>TASK(s):</b>	Types of Immunotherapy and Administration procedures.
<b>CFETP/STS REFERENCE(s):</b>	<b>4.14.</b>
<b>EQUIPMENT REQUIRED:</b>	Gloves (optional), appropriate needle length and gauge with syringe, 2x2 gauze pads, alcohol swabs, sharps container, immunotherapy record, allergy extract, appropriate dosing schedule, epinephrine, blood pressure cuff, stethoscope.
<b>TRAINING REFERENCE(s):</b>	Walter Reed Army Medical Center Immunology-Allergy Specialty Course Manual.
<b>REMARKS/NOTES:</b>	Review steps of the process one-on-one with the 453 SEI and/or nursing personnel trained in administering immunotherapy.
<b>OBJECTIVE:</b>	The trainee must successfully demonstrate without error the performance administering immunotherapy.

**EVALUATION INSTRUCTIONS:**

1. After the trainee has received instruction, allow sufficient practice on each part of the task.
2. The evaluator will **STOP** the procedure immediately and correct the trainee if performance becomes detrimental to patient safety at any time.
3. Use the performance checklist to ensure all steps of the task are accomplished.
4. Document task competency upon completion of the evaluation in the trainee's OJT record. Initial evaluation should be documented in the CFETP. All recurring evaluations should be documented on AF Form 1098.

PERFORMANCE ITEM	SAT	UNSAT
<b>ADMINISTRATION OF IMMUNOTHERAPY INJECTIONS</b>		
1. Obtain patient's immunotherapy vial(s).		
2. Medication Verification <ol style="list-style-type: none"> <li>a. Hand vial to patient to verify the following:               <ol style="list-style-type: none"> <li>1) Patient name</li> <li>2) Extract ingredients</li> <li>3) Expiration date</li> <li>4) Concentration strength/vial number</li> </ol> </li> <li>b. Verify allergy treatment schedule against vial number/patient's prescription.</li> </ol>		
3. Gather supplies: <ol style="list-style-type: none"> <li>a. Tuberculin syringe with 26-27 gauge needle</li> <li>b. 2 x 2 gauze</li> <li>c. Alcohol prep</li> <li>d. Peak flow, if needed</li> <li>e. Record of immunotherapy treatment</li> </ol>		
4. Evaluate patient verbally or review prescreen questionnaire (per local policy). Sample questions/criteria are; <ol style="list-style-type: none"> <li>a. How are you feeling today?</li> <li>b. Did you have any problems with your last injection?</li> <li>c. Females: Is there a chance you may be pregnant?</li> <li>d. Any significant medical changes since your last visit?</li> <li>e. What medication(s) are you currently taking?</li> <li>f. Do peak flow, if indicated</li> </ol>		
5. Calculate patient dose. <ol style="list-style-type: none"> <li>a. Verify schedule</li> <li>b. Verify for delayed reactions</li> <li>c. Verify date and dose of last injection against treatment record and with patient</li> </ol>		
6. Explain to the patient the increase/decrease in dose if applicable.		
7. Wipe the vial stopper with alcohol prep.		
8. Wash hands.		
9. Don gloves. (Optional)		
10. Draw and verify with patient the correct dose.		
11. Prep injection site with alcohol pad using proper aseptic technique.		
12. Inject needle in the subcutaneous tissue.		
13. Aspirate.		
14. Inject antigen.		
15. Withdraw and safely discard syringe.		
16. Apply pressure to the injection site with a 2x2 gauze pad.		
17. Document procedure: <ol style="list-style-type: none"> <li>a. Time</li> <li>b. Site</li> <li>c. Dose</li> <li>d. Concentration</li> </ol>		

e. Peak flow (If indicated) f. Schedule g. Initials		
18. Instruct patient to wait 30 minutes (or IAW local policy).		
19. After 30 minutes, check patient and injection site for local/adverse reactions.		
20. Document local or adverse reactions on patient treatment record.		
<b>FINAL RESULT:</b>		

**FEEDBACK:** Using this checklist as a source of information, discuss the trainee’s performance indicating strengths, weaknesses, suggested improvements, etc. If the trainee performed all steps of the task satisfactorily, document the results in the trainee’s OJT record.

\_\_\_\_\_  
Print Trainee Name

\_\_\_\_\_  
Print Trainers Name

\_\_\_\_\_  
Signature of Trainee & date

\_\_\_\_\_  
Signature of Trainer & date

***MIXING OF SERIAL 10 FOLD DILUTIONS***

<b>SUBJECT AREA:</b>	<b>4.18.</b> - Diluents.
<b>TASK(s):</b>	Extract types, Units of potency, Diluents, Mixing 10 fold dilutions, and labeling procedures.
<b>CFETP/STS REFERENCE(s):</b>	<b>4.18.</b>
<b>EQUIPMENT REQUIRED:</b>	Empty sterile vial, HSA diluent, phenol saline diluent, syringe(s), alcohol pads, labels, source vial (vial to be mixed down).
<b>TRAINING REFERENCE(s):</b>	Walter Reed Army Medical Center Immunology-Allergy Specialty Course Manual.
<b>REMARKS/NOTES:</b>	Review ten-fold dilution process one-on-one with 453 SEI medical technician.
<b>OBJECTIVE:</b>	The trainee must successfully demonstrate without error the performance of mixing serial 10 fold dilutions.

**EVALUATION INSTRUCTIONS:**

1. After the trainee has received instruction, allow sufficient practice on each part of the task.

<ol style="list-style-type: none"><li>2. The evaluator will <b>STOP</b> the procedure immediately and correct the trainee if performance could become detrimental to patient safety at any time.</li></ol>
--

3. Use the performance checklist to ensure all steps of the task are accomplished.
4. Document task competency upon completion of the evaluation in the trainee's OJT record. Initial evaluation should be documented in the CFETP. All recurring evaluations should be documented on AF Form 1098.

PERFORMANCE ITEM	SAT	UNSAT				
1. Identify reasons to perform a 10-fold dilution: <ol style="list-style-type: none"> <li>Current vial expired</li> <li>Patient had significant local/systemic reaction requiring a reduction in vial strength</li> <li>Patient was non-compliant in receiving timely immunotherapy</li> <li>Dropped/compromised vial</li> </ol>						
2. Verify allergen extract to be diluted <ol style="list-style-type: none"> <li>Patient name</li> <li>Extract ingredients</li> <li>Expiration date</li> <li>Concentration strength/vial number</li> </ol>						
3. Determine extract type and appropriate diluent:						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Extract types:</u></th> <th style="text-align: left;"><u>Diluent:</u></th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <ol style="list-style-type: none"> <li>Aqueous allergen extract</li> <li>Alum-precipitated</li> <li>Freeze dried</li> </ol> </td> <td style="vertical-align: top;"> <ol style="list-style-type: none"> <li>HSA (0.03% human serum albumin with 0.9% sodium chloride and 0.4% phenol)</li> <li>Phenol saline diluent (.09% sodium chloride with 0.4% phenol)</li> </ol> </td> </tr> </tbody> </table>	<u>Extract types:</u>	<u>Diluent:</u>	<ol style="list-style-type: none"> <li>Aqueous allergen extract</li> <li>Alum-precipitated</li> <li>Freeze dried</li> </ol>	<ol style="list-style-type: none"> <li>HSA (0.03% human serum albumin with 0.9% sodium chloride and 0.4% phenol)</li> <li>Phenol saline diluent (.09% sodium chloride with 0.4% phenol)</li> </ol>		
<u>Extract types:</u>	<u>Diluent:</u>					
<ol style="list-style-type: none"> <li>Aqueous allergen extract</li> <li>Alum-precipitated</li> <li>Freeze dried</li> </ol>	<ol style="list-style-type: none"> <li>HSA (0.03% human serum albumin with 0.9% sodium chloride and 0.4% phenol)</li> <li>Phenol saline diluent (.09% sodium chloride with 0.4% phenol)</li> </ol>					
4. Determine strength/dilution of extract needed.						
5. Gather supplies and equipment. <ol style="list-style-type: none"> <li>Diluent, verify expiration date</li> <li>Source Vial</li> <li>Alcohol</li> <li>Vial labels</li> <li>Syringe</li> <li>Patient Treatment Record/Prescription</li> </ol>						
6. Label appropriate diluent vial: <ol style="list-style-type: none"> <li>Name</li> <li>Contents</li> <li>Strength</li> <li>Expiration (expiration dates will vary based on source vial, reference WRAMC manual if unsure of expiration date). <i>Note: Expirations not to exceed expiration date on source extract vial or diluents vial.</i></li> <li>Vial number/color</li> <li>Prescription number, if available</li> </ol>						
7. Wash hands.						
8. Using aseptic technique, prepare source and diluent vial.						
9. Withdraw appropriate amount of extract: <ol style="list-style-type: none"> <li>0.2 mL if diluent vial contains 1.8 ml of diluent</li> <li>0.5 mL if diluent vial contains 4.5 ml of diluents</li> <li>1 mL if diluent vial contains 9.0 ml of diluent</li> </ol>						
10. Inject extract into diluent vial, discard syringe, and swirl gently.						

<i>(NOTE: Steps 6, 7 &amp; 8 may need to be repeated to obtain desired strength).</i>		
11. Document ten-fold dilution and any schedule change to patient's immunotherapy chart.		
12. <i>Remove and separately store source vial away from recently diluted immunotherapy extract to ensure patient safety and avoid medication errors.</i>		
<b>FINAL RESULT:</b>		

**FEEDBACK:** Using this checklist as a source of information, discuss the trainee's performance indicating strengths, weaknesses, suggested improvements, etc. If the trainee performed all steps of the task satisfactorily, document the results in the trainee's OJT record.

\_\_\_\_\_  
Print Trainee Name

\_\_\_\_\_  
Print Trainers Name

\_\_\_\_\_  
Signature of Trainee & date

\_\_\_\_\_  
Signature of Trainer & date

***ADMINISTER/READ DELAYED SKIN TESTS***

<b>SUBJECT AREA:</b>	<b>4.19.5.</b> – Administer/Read Delayed Skin Tests.
<b>TASK(s):</b>	Placing, documenting, and reading Type 4 hypersensitivity skin tests.
<b>CFETP/STS REFERENCE(s):</b>	<b>4.19.5.</b>
<b>EQUIPMENT REQUIRED:</b>	26/27 gauge. Needle and syringe, 2x2 gauze pads, alcohol swabs, sharps container, antigens.
<b>TRAINING REFERENCE(s):</b>	AFI 48-105, Surveillance, Prevention, and Control of Diseases and Conditions of Public Health or Military Significance; Walter Reed Army Medical Center Immunology/Allergy Specialty Course manual.
<b>REMARKS/NOTES:</b>	Review process one-on-one with 453 SEI medical technician and/or nursing personnel trained in administering/reading Delayed Skin Tests.
<b>OBJECTIVE:</b>	The trainee must successfully demonstrate without error placement, reading, and documentation of Type 4 hypersensitivity skin tests.

**EVALUATION INSTRUCTIONS:**

1. After the trainee has received instruction, allow sufficient practice on each part of the task.
2. The evaluator will **STOP** the procedure immediately and correct the trainee if performance could become detrimental to patient safety at any time.
3. Use the performance checklist to ensure all steps of the task are accomplished.
4. Document task competency upon completion of the evaluation in the trainee's OJT record. Initial evaluation should be documented in the CFETP. All recurring evaluations should be documented on AF Form 1098.

PERFORMANCE ITEM	SAT	UNSAT
<b>ADMINISTER/READ DELAYED SKIN TESTING (Tuberculosis skin tests and/or Anergy panels)</b>		
1. Verify the need/indication.		
2. Patient screening: <ul style="list-style-type: none"> <li>a. Have you ever had a positive TB skin test?</li> <li>b. Have you ever had the BCG vaccine?</li> <li>c. Do you have any allergies to food, medications, or vaccines?</li> <li>d. Have you been vaccinated in the last 4-weeks (no live vaccines in last 4 weeks)?</li> <li>e. Are you on long term steroid use?</li> <li>f. Can you return in 48-72 hours for a reading?</li> </ul>		
3. Gather supplies <ul style="list-style-type: none"> <li>a. PPD 5TU</li> <li>b. Additional antigens as requested</li> <li>c. Tuberculin syringe/needle</li> <li>d. 2 X 2 gauze</li> <li>e. Alcohol prep</li> </ul>		
4. Check medication expiration date(s). <i>Note: PPD vial expires 30 days after opening the vial and is light sensitive.</i>		
5. Draw 0.1 mL of antigens requested.		
6. Select appropriate site (preferred location is forearm, palm side up).		
7. Wash hands.		
8. Clean site with alcohol prep.		
9. Administer bevel up at a 5-15 degree angle. <i>Note: Bevel should be seen just below skin surface. A tense, pale wheal over the needle should appear and measure 6-10 mm. If wheal does not appear, repeat test at a site 2 inches away from original site.</i>		
10. Instruct patient when to return. <i>Note: Patient must return within 48-72 hours after placement. If patient fails to return within this time parameter, test must be repeated.</i>		
11. Give patient post-procedure instruction: <ul style="list-style-type: none"> <li>a. Do not Scratch/rub</li> <li>b. Do not cover the area with: <ul style="list-style-type: none"> <li>1) Tape</li> <li>2) Band-Aids</li> </ul> </li> <li>c. Do not apply: <ul style="list-style-type: none"> <li>1) Lotions/sun screen</li> <li>2) Creams</li> <li>3) Cologne</li> <li>4) Perfumes</li> </ul> </li> </ul>		
12. Document in CDC 731 and DOD immunization tracking system.		

<p>13. Read delayed skin test:</p> <ul style="list-style-type: none"> <li>a. Visually inspect the test site under good light <ul style="list-style-type: none"> <li>1) Erythema (do not measure erythema)</li> <li>2) Induration (hard, dense, raised formation)</li> </ul> </li> <li>b. Palpate area (use fingertips to locate margins of induration)</li> <li>c. Use fingertip as a guide for marking widest edges of induration</li> <li>d. Measure induration transversely (horizontal) on the forearm. <i>Note: On anergy panels, all antigens, with the exception of tuberculosis will be measured vertically and transversely (horizontally)</i></li> </ul>		
<p>14. Document results</p> <ul style="list-style-type: none"> <li>a. PPD <ul style="list-style-type: none"> <li>1) No induration: Treatment complete</li> <li>2) Induration: refer to Public Health based on local protocols</li> <li>3) Document in CDC 731 and/or DOD approved immunization tracking system. <i>Note: If no induration on PPD, record as 0 mm. Do not record as positive or negative</i></li> </ul> </li> <li>b. Anergy Panel: Refer patient back to provider along with appropriate documentation (based on local protocol)</li> </ul>		
<b>FINAL RESULT:</b>		

**FEEDBACK:** Using this checklist as a source of information, discuss the trainee’s performance indicating strengths, weaknesses, suggested improvements, etc. If the trainee performed all steps of the task satisfactorily, document the results in the trainee’s OJT record.

\_\_\_\_\_  
Print Trainee Name

\_\_\_\_\_  
Print Trainers Name

\_\_\_\_\_  
Signature of Trainee & date

\_\_\_\_\_  
Signature of Trainer & date