# Aerosol Generators

**Setting:** [ ] Lab  [ ] Clinical

**Evaluator:** [ ] Peer  [ ] Instructor

**Conditions (describe):**

---

**Equipment Used**

---

**Equipment and Patient Preparation**

1. Verifies, interprets, and evaluates physician’s order or protocol for mode of delivery and F\textsubscript{2}O\textsubscript{2}  
2. Scans chart for diagnosis and any other pertinent data and notes  
3. Selects, gathers, and assembles the necessary equipment  
4. Washes hands and applies standard precautions and transmission-based isolation procedures as appropriate  
5. Identifies patient, introduces self and department  
6. Explains purpose of the procedure and confirms patient understanding  
7. Selects appropriate aerosol generator and delivery device to achieve therapeutic objectives

**Assessment and Implementation**

8. Assembles equipment and verifies function  
9. Assesses patient for vital signs, chest palpation, percussion and auscultation, secretions, airway patency, and humidity deficit  
10. Adjusts gas source or mist density to the appropriate flow rate for adequate flow to meet the patient’s inspiratory demand; for oxygen concentrations 60% or greater, uses a tandem or double nebulizer setup  
11. Attaches the delivery device to the patient and ensures patient comfort  
12. Analyzes the F\textsubscript{2}O\textsubscript{2} and adjusts the entrainment selector or mist density if applicable

**Follow-up**

13. Reassesses the patient after application of the aerosol device  
14. Collects sputum, labels specimen containers, and sends to lab if indicated  
15. Maintains/processes equipment  
16. Disposes of infectious waste and washes hands  
17. Records pertinent data in chart and departmental records  
18. Notifies appropriate personnel and makes any necessary recommendations or modifications to the patient care plan

---

**Signature of Evaluator**  

**Signature of Student**

---

---
PERFORMANCE RATING SCALE

5 EXCELLENT – FAR EXCEEDS EXPECTED LEVEL, FLAWLESS PERFORMANCE
4 ABOVE AVERAGE – NO PROMPTING REQUIRED, ABLE TO SELF-CORRECT
3 AVERAGE – THE MINIMUM COMPETENCY LEVEL, NO CRITICAL ERRORS
2 IMPROVEMENT NEEDED – PROBLEM AREAS EXIST; CRITICAL ERRORS, CORRECTIONS NEEDED
1 POOR AND UNACCEPTABLE PERFORMANCE – GROSS INACCURACIES, POTENTIALLY HARMFUL

PERFORMANCE CRITERIA

1. DISPLAYS KNOWLEDGE OF ESSENTIAL CONCEPTS
2. DEMONSTRATES THE RELATIONSHIP BETWEEN THEORY AND CLINICAL PRACTICE
3. FOLLOW DIRECTIONS, EXHIBITS SOUND JUDGEMENT, AND DEMONSTRATES ATTENTION TO SAFETY AND DETAIL
4. EXHIBITS THE REQUIRED MANUAL DEXTERITY
5. PERFORMS PROCEDURE IN A REASONABLE TIME FRAME
6. MAINTAINS STERILE OR ASEPTIC TECHNIQUE
7. INITIATES UNAMBIGUOUS GOAL-DIRECTED COMMUNICATION
8. PROVIDES FOR ADEQUATE CARE AND MAINTENANCE OF EQUIPMENT AND SUPPLIES
9. EXHIBITS COURTEOUS AND PLEASANT DEMEANOR
10. MAINTAINS CONCISE AND ACCURATE RECORDS

SCALE

<table>
<thead>
<tr>
<th>PERFORMANCE CRITERIA</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DISPLAYS...</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>2. DEMONSTRATES...</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>3. FOLLOW...</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>4. EXHIBITS...</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>5. PERFORMS...</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>6. MAINTAINS...</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>7. INITIATES...</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>8. PROVIDES...</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>9. EXHIBITS...</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>10. MAINTAINS...</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>

ADDITIONAL COMMENTS: INCLUDE ERRORS OF OMISSION OR COMMISSION, COMMUNICATIVE SKILLS, AND EFFECTIVENESS OF PATIENT INTERACTION:

----------------------------------------

SUMMARY PERFORMANCE EVALUATION AND RECOMMENDATIONS

SATISFACTORY PERFORMANCE – Performed without error or prompting, or able to self-correct, no critical errors.

LATERAL LABORATORY EVALUATION. SKILLS MAY BE APPLIED/OBSERVED IN THE CLINICAL SETTING.

CLINICAL EVALUATION. STUDENT READY FOR MINIMALLY SUPERVISED APPLICATION AND REFINEMENT.

UNSATISFACTORY PERFORMANCE – Prompting required; performed with critical errors, potentially harmful.

STUDENT REQUIRES ADDITIONAL LABORATORY PRACTICE.

STUDENT REQUIRES ADDITIONAL SUPERVISED CLINICAL PRACTICE.

SIGNATURES

STUDENT: _______________________________ EVALUATOR: _______________________________

DATE: _______________________________ DATE: _______________________________