

**Respiratory Care Services
John Dempsey Hospital
Policy and Procedure Manual**

Subject: **Sputum Induction involving a Respiratory Isolation Patient**

Rationale: Sputum Induction provides humidification of the respiratory tract and facilitates the mobilization of secretions.

Note: Requests for STAT sputum inductions must be responded to in less than one hour.

Sputum inductions will only be done in negative pressure, externally exhausted rooms, or in a room where the exhaust is filtered by a portable hepa filter unit, or if the patient can sit in a self-contained portable hepa filtered unit (Demistifier).

Equipment: Jet Nebulizer with aerosol mask
corrugated tubing
1/2 liter IV bag of 3% saline (obtain from Respiratory Care)
air flow meter
gloves
isolation gown
respirator (isolation mask)
Appropriate sputum specimen collection container

Contraindications: If a patient is wheezing **do not use 3% saline**, give the patient a Ventolin treatment.

Procedure:

1. Instruct the patient to gargle with tap water to clear the oropharynx.
2. Add 60cc of 3% saline to the nebulizer.
3. Using 10 lpm, flow should be approximately 1ml of mist/minute
4. After about 10 to 15 minutes, remove the mask and instruct the patient to breathe deeply 3 or 4 times with the mouth open and then to cough forcefully.

(Collect sputum specimen into appropriate collection container. If sufficient, advise nursing so specimen can be forwarded to lab.)

5. If little sputum is produced extend the inhalation of 3% saline mist another 10 to 15 minutes and repeat the cough
6. If no sputum is expectorated after 30 minutes of mist inhalation, terminate the procedure
7. Discard remaining 3% saline.

Issued: 2/89

Revised: 2/13/92; 8/1/94, 9/95, 11/05