

STATE OF CONNECTICUT
DEPARTMENT OF DEVELOPMENTAL SERVICES
NURSING DELEGATION PROCEDURE

PROTOCOL: OXYGEN ADMINISTRATION VIA CYLINDER

- I. **Purpose:** To ensure adequate oxygen levels in the blood.

Definitions: Licensed Nurse: A Registered Nurse (R.N.) or a Licensed Practical Nurse (L.P.N.), working under the direction of a registered nurse, who holds a current license issued by the State of Connecticut under Chapter 378 of the Connecticut General Statutes.

II. Responsibility:

- A. **Training:** Training will be conducted by a licensed nurse.
- B. **Performance:**
 - 1. Direct care staff who have completed:
 - a. baseline competency training checklist of DDS
 - b. procedure task specific training
 - 2. Trained staff will follow individual procedural guidelines including notifying the licensed nurse as indicated
- C. **Monitoring:**
 - 1. The licensed nurse
 - 2. Trained staff performing the task under the clinical direction of the licensed nurse will notify the nurse of issues and/or outcomes as directed by the nurse.
- D. **Documentation:**
 - 1. Individuals who perform the tasks will record all pertinent information as instructed by the licensed nurse.
 - 2. Licensed Nurse will ensure agency compliance with required documentation.

III. Training to Include:

- A. **Initial:** Overview of the procedure, its purpose. Demonstration of techniques by licensed nurse and return demonstration by the student.
- B. **Documentation of Training and Monitoring:**
 - 1. Training: Licensed nurse completes training record of staff on “DDS Nursing Delegation Procedure Performance Evaluation Form”.
 - 2. Monitoring: Licensed nurse completes DDS “Nursing Delegation Task Competency Monitoring Form”.
- C. **Frequency of Monitoring and Task Performance:**
 - 1. Staff will be monitored in their proficiency at this skill as determined by the licensed nurse, but not to exceed 12 months.

IV. Related Knowledge:

- A. Background of the disease
- B. Safety Rules for Oxygen Administration (attached)
- C. Adverse effects of oxygen
- D. Emergency Procedures
- E. How to Use an Oxygen Tank (attached)

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Name:

Residence:

Order Date:

Dates Renewed:

(in pencil)

Order (if applicable):

I. Diagnosis:

II. Purpose of Procedure (why person needs procedure)

Signature of Delegating RN

Date

III. Procedure

TASK	RATIONALE
A. Gather Equipment: 1. Oxygen mask or cannula 2. Oxygen source 3. Connecting tubing 4. Humidifier (if used) 5. Distilled water (if used per manufacturer's guidelines) 6. Ensure that there is an adequate supply of oxygen.	<ul style="list-style-type: none">• To facilitate delivery of oxygen • Timed length of oxygen flow will vary depending on size of tank and amount of oxygen flow.
B. Individual's Preparation: 1. Identify the individual 2. Provide privacy 3. Explain procedure each time 4. Reassure 5. Allow the individual to assist in procedure as much as possible	<ul style="list-style-type: none">• To ensure understanding, and comfort, and to facilitate the procedure with the least amount of stress to the individual.
C. Perform Task:	

<ol style="list-style-type: none"> 1. Wash hands 2. Place an “Oxygen in Use” sign in a prominent location, visible from the outside and follow all other safety precautions (see attached). 3. Assemble and test the equipment: PLEASE SEE “HOW TO USE AN OXYGEN TANK” (attached) <ul style="list-style-type: none"> • If a humidifier is used, fill the humidifier with water and attach it to the flow meter. • Turn on the oxygen flow and check the humidifier for bubbling. • Adjust flow meter until the ball inside centers on the flow line corresponding to the liter flow prescribed. • Connect the mask or cannula to the system and test according to manufacturer’s instructions. A flow of air should be felt coming from the ends of the nasal prongs or from the mask. 4. Perform general check of the individual and environment (i.e.) check oxygen tubing to be sure it is not kinked. 5. Place the administration device on the individual. <ul style="list-style-type: none"> • Nasal prongs should be inserted so that the curve follows the natural curve of the nasal passage. Tubing is placed around each ear and secured under the chin. • An oxygen mask should cover the mouth and nose. Adjust the metal band to fit the bridge of the nose. Secure the mask behind the head with the elastic band. 6. Instruct the individual to breath normally. 7. Use oxygen only as directed – check physician’s orders. 	<ul style="list-style-type: none"> • Infection control • Safety Precautions (see attached) • To assure proper function of humidifier. This provides moisturized oxygen to individual. • Adjust the flow rate prior to putting on the mask, this prevents receiving a blast of oxygen and enables a quick check of the system to see that it is functioning correctly. • To provide an accurate controlled amount of oxygen as directed by the physician • To provide safety and comfort to individual • Proper application ensures accurate oxygen administration • Encourage normal respirations • Too much oxygen will cause as many problems as too little.
<p>D. Check Individual’s Status:</p>	
<ol style="list-style-type: none"> 1. Report any baseline changes to licensed nurse. 	<ul style="list-style-type: none"> • To ensure timely intervention addressing abnormal respiratory functions
<p>E. Care of Equipment:</p>	

<p>Maintenance</p> <ol style="list-style-type: none"> 1. Nasal cannula/mask should be washed with liquid soap and warm water once a week or prn. Thoroughly rinse and dry with a paper towel or clean cloth. Replace every month or sooner if needed. 2. If a humidifier is used, remove it from the oxygen source and wash with liquid soap and warm water between each refill. Rinse and dry. Refill the humidifier (if used) with water and reconnect it to the oxygen source. 3. If the humidifier is not to be used immediately, let it air dry and reconnect it to the oxygen source. Refill it before use. 4. Oxygen tubing should be replaced every 90 days or sooner if needed. 	<ul style="list-style-type: none"> • Keeping all oxygen equipment clean and replacing as needed prevents bacterial growth. • This prevents proliferation of bacteria.
<p>F. Documentation:</p>	
<ol style="list-style-type: none"> 1. Follow agency procedure for documentation 2. Information must include: <ul style="list-style-type: none"> • date/time • liter flow and route prescribed • client response • problems encountered • your signature 3. Promptly report initiation of oxygen administration to an RN if this is a change in condition. 4. Document on-going oxygen therapy and individual's cooperation. Document any change in baseline and report to RN. 	<ul style="list-style-type: none"> • To ensure timely intervention addressing abnormal respiratory functions • To provide accurate and complete information for individual's record

PLEASE NOTE: NO TASK IS CONSIDERED COMPLETED UNTIL DOCUMENTATION AND REQUIRED REPORTING OCCURS. ANY CHANGE OR VARIATION FROM THE INDIVIDUAL'S BASELINE SHOULD BE REPORTED PROMPTLY TO THE LICENSED NURSE.

Using an Oxygen Tank

An oxygen tank is a metal container filled with oxygen under high pressure.

Terms:

Cracking the tank: opening the valve just enough to let a small amount of oxygen out, which will clear dirt out of the valve.

Crush gasket: a nylon washer that comes with each new tank of oxygen. When you set up an oxygen tank, take this off and throw it away.

Flow meter: measures the flow of oxygen coming out of the tank in liters per minute (LPM).

Nasal cannula: tubing that brings the flow of oxygen from the oxygen tank into the nose.

Pressure gauge: measures how much oxygen is in the tank. A full tank has between 1800 and 2200 pounds per square inch (PSI).

Regulator: a device that contains both the flow meter and the pressure gauge. It is attached to the tank, and lets the oxygen out at a safe pressure. **Never** carry a tank by the regulator.

Sealing washer: a metal or metal-and rubber washer that is used to provide a tight seal between the oxygen tank and the regulator. The sealing washer helps to prevent oxygen from leaking.

Setting up the oxygen tank:

1. Wash your hands.
 2. Remove the white or blue plastic tape from the top of the tank. Remove and discard the disposable crush gasket. **Caution: never** use the crush gasket for setting up the tank.
 3. Crack the tank:
 - Point the oxygen outlet away from yourself and others.
 - Place the wrench (included with the oxygen tank) on the valve on top of the tank.
 - Turn the valve to the **left** (counterclockwise). A hissing sound means oxygen is coming out.
 - Stop once you hear the hissing sound, and turn the valve off by turning it to the **right** (clockwise).
- Don't over tighten.**

4. **Always** be sure the valve, regulator, and sealing washer are free of oil or grease. Oil or grease can cause a fire.
5. Put the sealing washer on the tank.
6. Put the regulator on the tank:
 - Make sure the regulator's three pins are lined up to the three holes on the tank.
 - Tighten the regulator onto the tank with the regulator's T-bar handle.
 - Open the tank by turning the valve with the wrench one complete turn counterclockwise. Turn the wrench slowly.
 - If you hear a loud hissing sound, this means there is a leak. Close the tank **immediately** by turning the wrench clockwise. Call your oxygen supply company **immediately**.
7. Check the pressure gauge.
8. Place the oxygen tubing on the regulator's outlet.
9. Turn the flow meter knob to the LPM setting prescribed by the doctor. **Note:** When turning on the oxygen tank, wait until the valve is fully open, to get an accurate reading of how much oxygen is in the tank.

Important Safety Rules for Oxygen Administration

1. Oxygen promotes rapid burning. Do not allow smoking or open flames, candles, gas stoves, heaters, etc. within 5 feet of oxygen source. Do not use cleaning fluids, paint thinner, aerosol sprays, grease, oil or petroleum-based products on or near oxygen.
2. Only use oxygen as ordered. Too much oxygen will cause as many problems as too little oxygen.
3. Oxygen tanks should be reordered when the pressure gauge reads 500 psi or one-quarter full or per agency policy.
4. Secure the oxygen cylinder on a cart or stand to prevent falls and subsequent injury. Do not use cylinders for portable use.
5. Avoid skin, eye and clothing contact with liquid from a leaking oxygen system. If this occurs, contact your oxygen supply company immediately.
6. Avoid using electrical appliances (e.g. razors, hairdryers) while using oxygen.
7. Always keep distilled water capped and refrigerated.
8. Do not leave oxygen on if not in use.

