

Training Manual for Certification 1 Addendum

Prescribed Medications and Health-Related Activities

Teachers MAY NOT OMIT any of the materials in this curriculum addendum. The material on the following pages is required.

However, teachers are free to supplement with any additional materials they believe to be relevant for the group they are teaching.

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Medication Administration Reference Grid

Documentation of Certified DD Personnel Performance of Skills Covered by Certification 1 Training: Initial Certification/Renewal

Note to Teachers:

The following curriculum for Nasal Versed may be used as the teacher wishes.
The material is optional and may or may not be relevant for the group being taught.

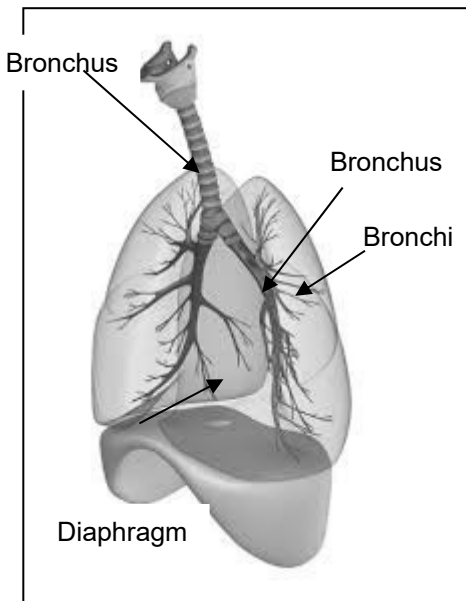
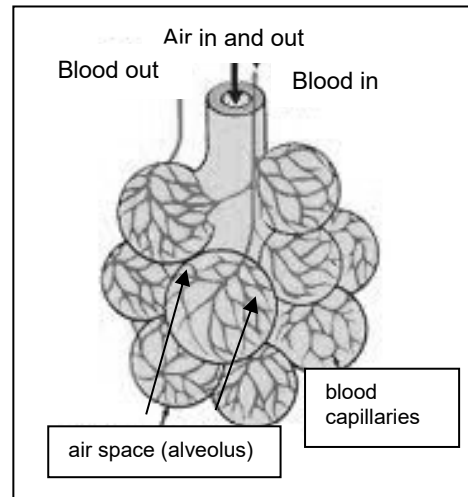
1-6 **Nasal Versed**

7 Checklist for Administration of Nasal Versed (Midazolam)

OXYGEN ADMINISTRATION

Vocabulary:

Alveoli: Tiny balloon-like sacks at the end of a bronchi.



Bronchus: One main air passage into each lung. Originates at the end of the trachea.

Bronchi: Smaller air passages originating from the bronchus in each lung. There are many of these.

Capillaries: Very tiny blood vessels in the wall of the alveolus that absorb oxygen that is distributed to the body.

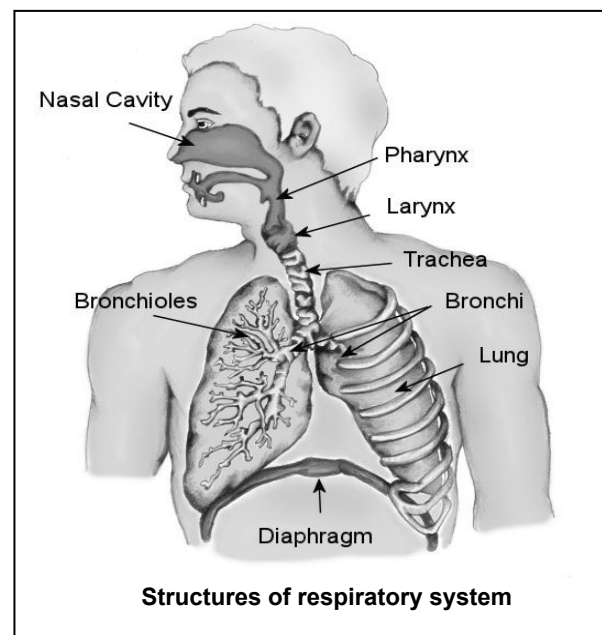
Diaphragm: Dome shaped muscle separating the chest from the abdomen. It is the muscle that makes breathing happen.

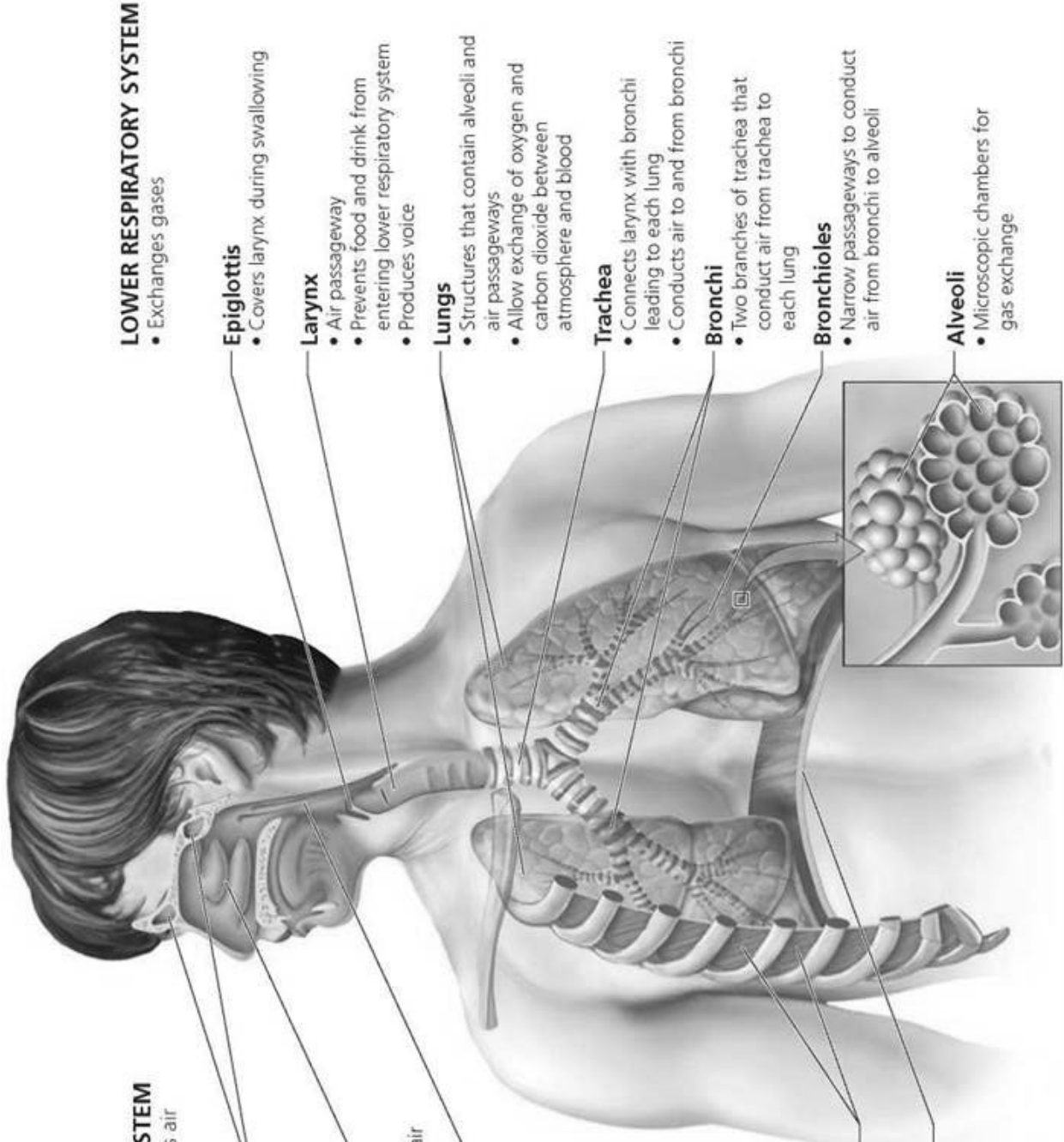
Lungs: Main organ for the respiratory system. Contains 5 lobes – 2 on the left and 3 on the right. They supply oxygen to the body as well as eliminate carbon dioxide from the body.

Epiglottis: A flap of cartilage at the entrance of the trachea. It closes over the trachea to prevent food and fluid from entering the windpipe and lungs.

Trachea: Windpipe. Tube that allows air to pass from the back of the mouth into the lungs.

Pleura: Thin membrane with 2 layers. Fluid between these 2 layers provides for lubrication allowing for smooth, uniform expansion and contraction of the lungs during breathing.





UPPER RESPIRATORY SYSTEM

- Filters, warms, and moistens air

Sinuses

- Cavities in skull
- Lighten head
- Warm and moisten air

Nasal cavity

- Produces mucus
- Filters, warms, and moistens air
- Olfaction

Pharynx

- Passageway for air and food

RESPIRATORY MUSCLES

- Cause breathing

Intercostal muscles

- Move ribs during breathing

Diaphragm

- Muscle sheet between chest and abdominal cavities with a role in breathing

LOWER RESPIRATORY SYSTEM

- Exchanges gases

Epiglottis

- Covers larynx during swallowing

Larynx

- Air passageway
- Prevents food and drink from entering lower respiratory system
- Produces voice

Lungs

- Structures that contain alveoli and air passageways
- Allow exchange of oxygen and carbon dioxide between atmosphere and blood

Trachea

- Connects larynx with bronchi leading to each lung
- Conducts air to and from bronchi

Bronchi

- Two branches of trachea that conduct air from trachea to each lung

Bronchioles

- Narrow passageways to conduct air from bronchi to alveoli

Alveoli

- Microscopic chambers for gas exchange

Administration of Oxygen (O₂)

Oxygen: What is it?

O₂ is a colorless, odorless gas. It is essential for life. O₂ in the air is absorbed through the lungs and into the blood where it binds to the hemoglobin in red blood cells. It's the circulating red blood cells that distribute oxygen throughout the body.

Why is O₂ used?

- ◀ Decrease shortness of breath and fatigue.
- ◀ To restore O₂ blood levels to normal.
- ◀ Improve sleep in those with sleep apnea.
- ◀ Increase life span of some people with COPD (chronic obstructive pulmonary disease).



Regulator on oxygen tank



Oxygen tank on a transporter

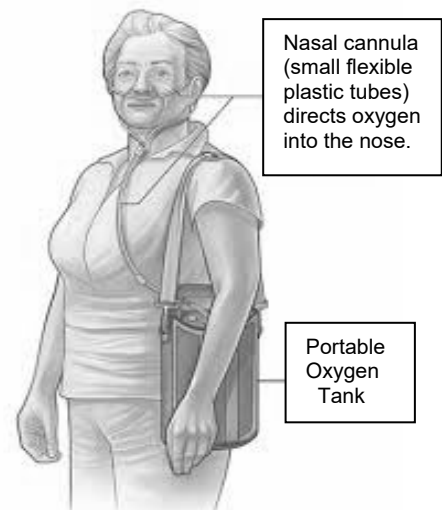
How can O₂ be given?

- ◀ By nasal cannula
- ◀ By mask

A person may use a concentrator – a device that extracts oxygen from the air;

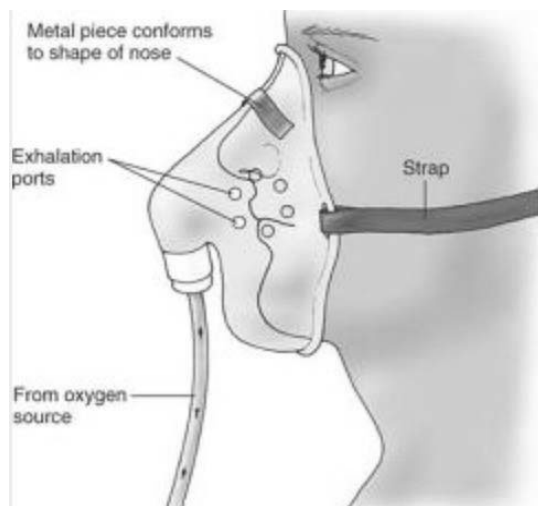
OR

A person may use oxygen supplied from an oxygen tank



Woman with portable O₂ tank

Person wearing O₂ mask



Man using oxygen concentrator

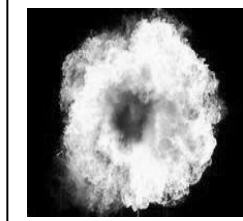


OXYGEN THERAPY

Are there any safety hazards with use of oxygen (O₂) therapy?

◀ Fire or explosion is a huge safety hazard.

◀ **NO SMOKING WHILE RECEIVING O₂ THERAPY!!**



◀ A person on O₂ therapy may not be in the same room where a flame is active or where electrical equipment is in use. O₂ is highly flammable.

◀ Avoid materials that cause static electricity. Use cotton blankets.

◀ Do not use acetone or any other volatile material when oxygen is in use.

◀ Anyone transporting an individual on oxygen needs to know how to shut off the tank if it is hissing or there is an accident.



Side Effects of Oxygen Therapy Can Include:

- Fatigue (tiredness)
- Morning headaches
- Dry and/or bloody nose
- Skin irritation from face mask or nasal cannula

Is there a limit on the amount of time the person can receive oxygen?

No. Oxygen may be given as needed, intermittently, or continuously – depending on the needs of the person.

What care does the person on oxygen need?

◀ Protect the person's nose, face and ears from irritation caused by nasal cannula or face mask. Use a water-based lubricant where the mask or cannula rub the face, nose or ears. Vaseline® or petroleum jelly is NOT water based!

◀ Be sure to strictly follow safety measures to prevent fire or explosion.

◀ Provide frequent opportunities for the person to keep their mouth and throat moist.

Whose responsibility is it to order more supplies?

Getting more supplies is everyone's job!



Call equipment provider for refills when you see supplies are getting low. Record and communicate with others that you reordered supplies.

What are the signs of receiving too little oxygen?

- ◀ Confusion
- ◀ Headache
- ◀ Restlessness
- ◀ Blurred vision
- ◀ Tunnel vision
- ◀ Cyanosis (bluish tint to the lips, earlobes, and / or nail beds)
- ◀ Rapid heart rate
- ◀ Elevated blood pressure
- ◀ Rapid breathing
- ◀ Shortness of breath
- ◀ Excessive tiredness

What are the signs of receiving too much oxygen?

- ◀ Slow respiratory rate < 8 breaths/min
- ◀ Difficult to wake up



When do I need to call a health-care professional (HCP)?



- ◀ If you see any signs of too much or too little oxygen (see boxes to left)
- ◀ For any of the side effects listed on page 4
- ◀ If the equipment is not working right
- ◀ If the person is refusing oxygen therapy or insisting you change the number of liters given
- ◀ The person is having trouble sleeping because they cannot breathe well

How do I clean oxygen equipment?

Oxygen Concentrator

- ◀ Clean at least once a week. The outside of the concentrator can be wiped down with a damp cloth and a mild dish detergent. Never spray the cleaner directly onto the machine.
- ◀ The oxygen concentrator may have exterior filters that need to be cleaned at least once a week. They can be easily removed and placed under warm running water. Excess water should be squeezed out and the filters should be left out to air dry.

Cannula / Mask

- ◀ Clean daily; if visibly soiled; or after intermittent use. Use mild dish detergent and rinse.
- ◀ Towel or air dry. ◀ Replace every 2 (two) weeks.

Tubing

- ◀ Replace monthly.

Water Trap

- ◀ Empty as needed.
- ◀ Remove at least twice a week and clean with mild dish detergent and rinse.

Humidifier Bottle

- ◀ Use only distilled or sterile water.
- ◀ Empty daily and replace with fresh distilled or sterile water.
- ◀ Clean and disinfect at least twice a week. First wash with mild dish detergent and rinse well; then soak in 1 part water and 1 part distilled white vinegar. Rinse thoroughly.



Distilled white vinegar



Distilled Water

Oxygen is a medicine. It is a gas. As a medicine, you are expected to follow doctor's orders precisely as written on the MAR. The dose (amount) is the flow rate per minute that will be displayed on the cylinder gauge. The flow rate must be set only at the prescribed rate. Example: 2 liters per minute.

Below is a listing of precautions you **MUST** take when oxygen is in use. To help you grasp the precautions more clearly, they are arranged in categories according to where the person might be when using their oxygen.

Smoking

- ◄ **No one should be smoking** when oxygen is in use. If the individual using oxygen insists on smoking, they will need to remove their mask / cannula. Turn off the oxygen, remove mask / cannula from their face and body. Then, have them wait 10 minutes after turning the oxygen off before smoking. Anyone else in the house that insists on smoking, must go outside.
- ◄ **Post "No smoking" signs in every room of the home where oxygen is in use.**

Precautions while working in the kitchen

- ◄ When the stove is in use and the person is in the kitchen, turn off their oxygen and remove their mask / cannula.
- ◄ When using electrical devices such as can openers, mixers, blenders, knives, or skillet while the person using oxygen is in the kitchen, turn off the oxygen and remove their mask / cannula.
- ◄ A person wearing a mask or cannula must be at least 10 feet away from the stove or active electrical appliances. Tanks or concentrators must also be at least 10 feet from the stove or electrical appliances in use even if the O₂ is turned off.

Precautions with use of health, hygiene and beauty products

- ◄ Products containing oil or grease, such as body oil and some moisturizers can easily ignite. Keep oils and grease away from where oxygen is in use. This includes petroleum products such as lip balm and nail polish remover (acetone).
- ◄ Aerosol sprays containing combustible materials (i.e. hairspray, air fresheners) should not be used while the oxygen is in use.
- ◄ Electric razors or hairdryers should not be used while oxygen is on. Battery powered razors and hairdryers can be used when oxygen is on.
- ◄ Appliances that have a control switch (i.e. heating pad, vibrating devices, electric blankets, electric toothbrushes) should not be used because the control switch could generate a spark.

Precautions while tinkering with projects/crafts

- ◄ No one should use petrol, cleaning fluids, or anything in an aerosol can while oxygen is on.

Oxygen Cylinder (contains compressed oxygen gas)

- ◄ Keep oxygen cylinders at least 10 feet away from a heat source (heater, gas stove), open flame or electrical devices.
- ◄ Store oxygen cylinder (tank) upright in a well-ventilated area away from flame, heat source or direct sunlight. Do not cover the cylinder with cloth or plastic. Do not store in closets, behind curtains, or other confined spaces. Secure cylinder on a stand with a strap to hold it in place.
- ◄ Handle the cylinder gently to avoid damaging it.
- ◄ If transporting oxygen cylinder, do not lay it down in the bed of a truck or trunk of a car. Place it carefully on the back seat of the car. Secure it so it does not roll around, but stays in place.
- ◄ Be sure to use the correct pressure gauge and regulator.
- ◄ When the cylinder is almost empty, close the valve and mark the cylinder as empty. Do not store full and empty cylinders together.

Oxygen Concentrator (these filter nitrogen out of the air, providing almost pure oxygen)

- ◄ Be sure the concentrator is plugged into an electrical outlet. Never use an extension cord or power strip.
- ◄ Keep concentrator away from curtains or drapes and place in a well-ventilated area.
- ◄ Do not store or keep concentrator in a closet or other confined space.
- ◄ Be sure the concentrator is inspected and serviced per the supplier's instructions.

General Precautions

- ◄ Be sure all electrical equipment near the oxygen is properly grounded.
- ◄ Be sure you have smoke alarms in the home.
- ◄ Candles, matches, wood stoves and sparking toys can serve as ignition sources. Keep these items out of the home.
- ◄ Keep oxygen equipment clean and dust free.
- ◄ Keep people at least 10 feet away from an open flame if oxygen is flowing. This includes fire places, wood burning stoves and gas stoves.
- ◄ Avoid build-up of static electricity by using a humidifier in the winter when the heat is on and the air tends to be dry. Encourage the person to wear cotton. Avoid wool and nylon as these fabrics attract static electricity.
- ◄ Be aware of oxygen tubing dragging on the floor to prevent falls or tangles.

Checklist for Oxygen Therapy

- _____ 1. Check tank for adequate oxygen supply
- _____ 2. Explain procedure to person
- _____ 3. Explain safety precautions
- _____ 4. Wash your hands and put on gloves
- _____ 5. Connect the nasal cannula or mask to the oxygen source
- _____ 6. Adjust flow rate as directed by healthcare professional (prescription)
- _____ 7. Check that oxygen is flowing from cannula or mask
- _____ 8. Place cannula in person's nostrils, or place mask on person's face
- _____ 9. Adjust cannula or mask as necessary for person's comfort
- _____ 10. Instruct person using a cannula to breathe through their nose with mouth closed
- _____ 11. Recheck the tank for oxygen supply
- _____ 12. Assure proper flow rate
- _____ 13. Remove gloves, wash hands
- _____ 14. Document:
 - ◀ rate of oxygen flow
 - ◀ person's response to cannula/mask
 - ◀ any comfort measures initiated
 - ◀ problems encountered with use of cannula/mask
 - ◀ measures taken to address problems encountered
- _____ 15. Recheck flow rate and oxygen supply, and flow from cannula every 2 hours. Also before and after transition to different activities and locations. Document findings.
- _____ 16. Check pulse oximeter reading as directed by healthcare professional. Document outcome. Continue or discontinue oxygen as prescribed.
- _____ 17. When oxygen gauge is near or at the red zone, change tank and repeat steps 2-14
- _____ 18. The cannula/mask should be removed and cleaned if oxygen is not flowing, after use of PRN oxygen, and if visibly soiled.

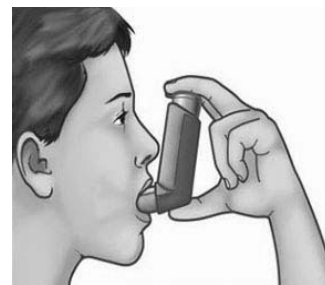
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_____ **Instructor initials** **Instructor Name** _____

Comments:

Categories of Inhaled Medications

Respiration is the act of breathing in and out. Inhaled medications are medications that are taken into the lungs through the nose or mouth. They are also called pulmonary medications. Some inhaled medications are prescribed as “rescue” medications - medication for sudden wheezing or shortness of breath; some are “maintenance” medications - used routinely to prevent the occurrence of distressing respiratory symptoms.



If the person is in distress, use the rescue inhaler as needed. Maintenance inhalers should be used in the prescribed manner, for example, twice daily.

Commonly Used Inhaled Medications, Side Effects, and Related Care

Category	Examples of Medications	Examples of Side Effects	Related Care
<p>Bronchodilators</p> <p>Used to relax airway muscles making breathing easier; given by nebulizer or inhaler.</p> <p>Can be short-acting, “rescue” medications or long-acting “maintenance” medications.</p>	<p>Rescue</p> <p>Proventil Ventolin Duoneb®</p> <p>Maintenance</p> <p>Atrovent Spiriva® Serevent® Foradil® Brovana®</p>	<ul style="list-style-type: none"> ◀ Tremors ◀ Dizziness ◀ Increased pulse ◀ Bad taste in mouth ◀ Nausea, vomiting ◀ Agitation ◀ Hyperactivity <p>Atrovent and Spiriva side effects</p> <ul style="list-style-type: none"> ◀ Dry mouth ◀ Constipation ◀ Difficulty passing urine 	<ul style="list-style-type: none"> ◀ Observe breathing and secretions ◀ Do not share a nebulizer or an inhaler ◀ Rinse mouth and spit after use ◀ Clean inhaler after use
<p>Steroids*</p> <p>Used for maintenance treatment for breathing problems associated with pulmonary disease [COPD]. COPD includes both chronic bronchitis and emphysema.</p>	<p>Maintenance</p> <p>Advair® Symbicort® Dulera® Breo® QVAR® AeroSpan® Flovent® Pulmicort Respules® Pulmicort Flexhaler® Asmanex® Alvesco®</p>	<ul style="list-style-type: none"> ◀ Thrush in the mouth ◀ Hoarse voice ◀ Cough 	<ul style="list-style-type: none"> ◀ Observe breathing and secretions. ◀ A spacer must be used when administering steroids to prevent thrush. Ask physician if a spacer is appropriate for this drug or person. ◀ Rinse mouth and spit, or brush teeth after use ◀ Use a delivery device specific to the drug for that person

*Bronchodilators are generally prescribed before steroids because of serious side effects from steroids.

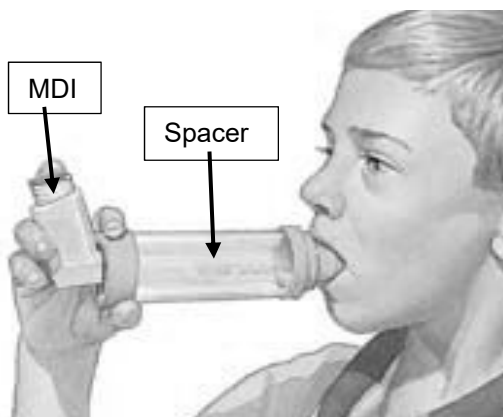
INHALERS

Inhalers contain either short-acting or long-acting medicines. Short-acting medicines relax and open the breathing tubes in the lungs. These are called rescue inhalers because they work quickly and help “rescue” a person if breathing suddenly becomes difficult. Long-acting inhalers are used daily. They help control asthma and prevent symptoms from occurring. These are called maintenance inhalers because the medicine works more slowly but lasts much longer. Maintenance inhalers do not work to treat sudden symptoms.

Types of Inhalers

Metered Dose Inhaler (MDI)

- ◀ Like a mini-aerosol can; pushes out a pre-measured spray of medicine.
- ◀ When the person pushes down on the aerosol container, a measured “puff” of medicine is released.
- ◀ May be used with a spacer or holding chamber to make it easier to use.
- ◀ The spacer eliminates the need to closely coordinate pushing down the inhaler aerosol container and inhaling the medicine.



Boy using MDI with spacer

Multidose dry powder inhalers

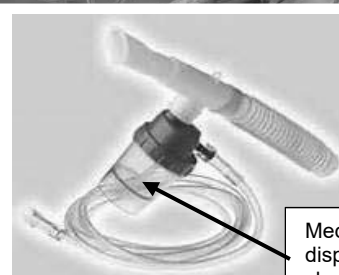


Dry Powder Inhaler (DPI)

- ◀ Delivers medication in powder form, but doesn't spray out.
- ◀ User must do more of the work, inhaling the powdered medicine quickly and forcefully

Nebulizer

- ◀ Used when a larger amount of medication is needed or when the person is not able to use the inhaler.
- ◀ Electric or battery powered machine that turns liquid medicine into a fine mist that's inhaled into the lungs.
- ◀ The user breathes in the mist through a mouth piece or facemask.



Medication dispensing chamber

Certification 1 Skills Checklist: Administering MDI with Spacer

Follow steps 1-8 on "General Checklist for Administering Oral Medications" then

- _____ 9. Check equipment and clean if dirty.
- _____ 10. Wash hands and put on gloves.
- _____ 11. Identify person to receive the medicine and explain you are giving his/her medication for that specific hour.
- _____ 12. Assist person to a comfortable sitting position.
- _____ 13. Tell person the name of the medication and its purpose when you give the medication to him/her.
- _____ 14. Give person tissues.
- _____ 15. Invert canister and shake thoroughly.
- _____ 16. Insert metal canister into end of mouthpiece; remove protective cap from the inhaler and from the spacer.
- _____ 17. If canister is new and never used, you will need to prime it. With mouth-piece pointing into the air, away from everyone, press once on the canister base to ensure canister contains medication and is operating properly. Continue to prime the canister per manufacturer's instructions. If canister is used daily, you do not need to prime it. If canister has not been used in the last 3 days or per manufacturer's instructions, prime it before use.
- _____ 18. Put the inhaler into the spacer.
- _____ 19. Have person exhale deeply away from the spacer.
- _____ 20. Bring the spacer to person's mouth, put the mouthpiece between his/her teeth and close their lips around it.
- _____ 21. Press the top of the canister once.
- _____ 22. Have person breathe in very slowly until he/she has taken a full breath. If you hear a whistle sound, the person is breathing in too fast.
- _____ 23. Have person hold his/her breath for up to 10 seconds, then remove mouthpiece and ask person to exhale slowly. If more than 1 puff is ordered, wait 30 seconds, then repeat steps 19-23 for subsequent puffs. Be sure to wait 30 seconds between puffs!
- _____ 24. If a second inhaler (a 2nd medication given per inhaler) is ordered, wait at least 5 minutes before administering the 2nd inhaled medication and repeat steps 13-23.
- _____ 25. Replace protective cap and have person rinse mouth with water and then spit it out. Be sure person does NOT swallow rinsing water! They will get a systemic effect if they swallow the rinsing water.
- _____ 26. Leave person in a comfortable position following observation of the results.
- _____ 27. Remove and dispose of gloves properly and wash hands.
- _____ 28. Clean and store equipment.
- _____ 29. Document medication(s) given including:
 - ◀ Name of medication
 - ◀ Your initials
 - ◀ Number of inhalations given
 - ◀ Note any complaints / any action taken

Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:

Certification 1 Skills Checklist: Administering MDI Inhalers without Spacer

Follow steps 1-8 on “General Checklist for Administering Oral Medications” then

- _____ 9. Check equipment and clean if dirty.
- _____ 10. Wash hands and put on gloves.
- _____ 11. Identify person to receive the medicine and explain you are giving his/her medication for that specific hour.
- _____ 12. Assist person to a comfortable sitting position.
- _____ 13. Tell person the name of the medication and its purpose when you give the medication to him/her.
- _____ 14. Give person tissues.
- _____ 15. Insert metal canister into end of mouthpiece and remove protective cap.
- _____ 16. Invert canister and shake thoroughly.
- _____ 17. If canister is new and never used, you will need to prime it. With mouth-piece pointing into the air, away from everyone, press once on the canister base to ensure canister contains medication and is operating properly. Continue to prime the canister per manufacturer’s instructions. If canister is used daily, you do not need to prime it. If canister has not been used in the last 3 days or per manufacturer’s instructions, prime it before use.
- _____ 18. Have person exhale deeply, then place the mouthpiece directly in his/her mouth between teeth (keep tongue flat under mouthpiece) and seal lips around the mouthpiece holding canister vertically.
- _____ 19. Have person slowly inhale through the mouth while pressing firmly on the upended canister.
- _____ 20. Have person hold his/her breath for up to 10 seconds, then remove mouthpiece and ask person to exhale slowly. If more than 1 puff is ordered, wait 30 seconds, then repeat steps 18-20 for subsequent puffs. Be sure to wait 30 seconds between puffs!
- _____ 21. If a second inhaler (a 2nd medication given per inhaler) is ordered, wait at least 5 minutes before administering the 2nd inhaled medication and repeat steps 13-20.
- _____ 22. Replace protective cap and have person rinse mouth with water and spit water out. Do not let person swallow the rinse water. The person will get a systemic effect if they swallow the rinse water.
- _____ 23. Leave person in a comfortable position following observation of the results.
- _____ 24. Remove and dispose of gloves properly and wash hands.
- _____ 25. Clean and store equipment.
- _____ 26. Document medication(s) given including:
 - ◀ Name of medication ▶ Your initials
 - ◀ Number of inhalations given ▶ Note any complaints / any action taken

Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:

Certification 1 Skills Checklist: Administering DPI Inhalers

Follow steps 1-8 on “General Checklist for Administering Oral Medications” then

- _____ 9. Check equipment and clean if dirty.
- _____ 10. Wash hands and put on gloves.
- _____ 11. Identify person to receive the medicine and explain you are giving his/her medication for that specific hour.
- _____ 12. Assist person to a comfortable sitting position.
- _____ 13. Tell person the name of the medication and its purpose when you give the medication to him/her.
- _____ 14. Give person tissues.
- _____ 15. Load the dry medicine in the inhaler chamber as directed by the manufacturer.
- _____ 16. Have person exhale normally away from the inhaler chamber.
- _____ 17. Have the person place the mouthpiece in their mouth with lips sealed around the mouthpiece, **forcefully inhale** through the mouth.
- _____ 18. Have person hold his/her breath for up to 10 seconds, then remove mouthpiece and ask person to exhale slowly. If more than 1 puff is ordered, wait 30 seconds, then repeat steps 15-18 for subsequent puffs. Be sure to wait 30 seconds between puffs!
- _____ 19. Close the mouthpiece and replace protective cap and have person rinse mouth with water and then spit water out. Do NOT allow person to swallow rinse water, they will get a systemic effect.
- _____ 20. Leave person in a comfortable position following observation of the results.
- _____ 21. Remove and dispose of gloves properly and wash hands.
- _____ 22. Cleanse and replace equipment as specified on the MAR.
- _____ 23. Document medication(s) given including:
 - ◀ Name of medication
 - ◀ Your initials
 - ◀ Number of inhalations given
 - ◀ Note any complaints / any action taken

Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:

Certification 1 Skills Checklist: Administering Nebulizer Treatment

Follow steps 1-8 on “General Checklist for Administering Oral Medications” then

- _____ 9. Check equipment and clean if dirty.
- _____ 10. Wash hands and put on gloves.
- _____ 11. Identify person to receive the medicine and explain you are giving his/her medication for that specific hour.
- _____ 12. Assist person to a comfortable sitting position.
- _____ 13. Tell person the name of the medication and its purpose when you give the medication to him/her.
- _____ 14. Give person tissues.
- _____ 15. Plug in the nebulizer.
- _____ 16. Place the pre-measured dose of medication into the nebulizer’s dispensing chamber.
- _____ 17. Have the person place the mouthpiece in his/her mouth having them use their lips to form a tight seal on the mouthpiece. (If the person uses a mask instead of a mouthpiece, be sure the mask fits well.)
- _____ 18. Turn the machine on. Adjust flow of oxygen / air as ordered. Encourage the person to breathe normally during treatment with occasional deep breaths; the medication works better with deep inhalations, but avoid hyperventilation.
- _____ 19. Follow physician’s or nurse’s instructions re: taking and documenting the person’s pulse and respirations.
- _____ 20. Continue the treatment until all medication is given, usually 10-15 minutes.
- _____ 21. If needed, assist person to wipe face and apply lip balm.
- _____ 22. Remove and dispose of gloves properly and wash hands.
- _____ 23. Clean and store equipment.
- _____ 24. Document medication(s) given including:
 - ◀ Name of medication
 - ◀ Pulse and respirations at end of treatment
 - ◀ Your initials
 - ◀ Note any complaints / any action taken

Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:

Musculoskeletal Topical Over-The-Counter Medications

OVERVIEW

Most drugs can only be administered by unlicensed direct service personnel (DSP) who have a current DODD Medication Administration Certification 1 **AND** a prescription to administer the drug.

- ◄ DODD Category 1 Medication Administration Certification does allow for certified DSP to administer **topical OTC medications for musculoskeletal comfort** without a prescription.
- ◄ DSP must have current Category 1 Medication Administration Certification.
- ◄ **Other OTC topical medications** for comfort, cleansing and protection of intact skin, hair, nails, teeth, and oral surfaces **require other DODD specialized training.**

ORAL OTC MEDICATIONS ALWAYS REQUIRE A PRESCRIPTION FOR CERTIFIED DSP TO ADMINISTER

Products that contain medications that the FDA calls “drugs” will list “Drug Facts” on the label and may include:

- | | | |
|-------------|------------------|--------------|
| ◄ Icy Hot® | ◄ Aspercreme® | ◄ Biofreeze® |
| ◄ Blue Emu® | ◄ Penetran Plus® | ◄ BenGay® |

What DSP MAY DO:

DSP who have current **Category 1 Certification** are allowed to administer topical OTC (over-the-counter) products for muscular skeletal comfort without a prescription **ONLY when**:

- ◄ Applying on intact skin
- ◄ Using for sore muscles and joints such as backache or soreness after exercise
 - Not for new swelling
 - Not to replace evaluation or treatment by a licensed healthcare professional (HCP) due to injury
- ◄ Treating on-going muscle and joint conditions that have already been diagnosed by a licensed healthcare professional. Examples can include:
 - arthritis •bursitis •muscle strain •muscle sprains

What DSP MAY NOT DO:

- ◄ Apply to open wounds
- ◄ Use longer than the package recommends unless otherwise directed by a HCP
- ◄ Use for a new condition that needs to be checked by a HCP

Terminology

Over-the-Counter (OTC) medication: Any drug (medication) that can be purchased without a prescription.

Intact skin: No breaks, scrapes, cuts or openings are present.

Diagnosis: Refers to a disease or condition that must be identified based on an assessment by a physician or nurse practitioner. By assessing and analyzing the combination of symptoms, a nurse practitioner or physician can identify (make a diagnosis) the disease the person is experiencing. Examples can include arthritis, bursitis, chronic musculoskeletal pain, muscle strain and muscle sprain.

Symptom: What the person experiences; what the condition feels like. Examples of symptoms include such things as swelling, decreased range of motion, redness, ache, discomfort, not wanting to move or bear weight on a leg.

Active ingredient: The functional part or component of the drug that produces the desired outcome. For example, in Icy Hot Pain Relieving Cream®: menthol 10% and methyl salicylate 30% are the active parts of the product that provide temporary pain relief.

Analgesic: Something that relieves pain.

As needed: Using an OTC topical medication only when there is a reason for using it.

Brand Name: Products with a registered trademark ® name. The name represents the active ingredient or combination of active ingredients in the product by that particular manufacturer.

Drug: A product defined and classified by the US Food and Drug Administration (FDA). On every OTC product that contains a “drug” the word “drug” and the drug’s name will be on the label. **For example:** menthol 10% and methyl salicylate 30% are the “drugs” in Icy Hot Pain Relieving Cream®.

Generic products: Have the same active ingredient as a brand product. Some brand products also have additional inactive ingredients. Generic products cost less for the same amount of active ingredient(s). Example: CVS® brand EXTRA Strength Cold and Hot Pain Relieving Cream also has menthol 10% and methyl salicylate 30%. It would be the generic equivalent for Icy Hot Pain Relieving Cream®.

Manufacturer’s label and instructions: Information found on the topical OTC product packaging. It will always include the name and strength of the “drug” that is in the product.

Prescription: A written order from a doctor or nurse practitioner for a drug / medication.

Storage: The protection and proper handling of a medication to assure it retains its ability to do what it is supposed to do. Be sure to follow manufacturer’s instructions. Always store topical medications separately from oral medications.

Requirements for Use of OTC Topical Medications

- ✓ **Person-Centered Purchasing:** Products *should be chosen by the individual* with assistance from staff as needed to choose the right product for the right use. The individual's personal preferences must be considered when assisting with choices. This includes preferences of scent / smell, texture, price, packaging, etc. A pharmacist can also help the person with product choices.
- ✓ **Documentation:** OTC topical medication documentation must include the person's name and allergies, product name, date, time and reason used, where applied, and staff name. See sample documentation form on DODD's Medication Administration page.

Allergy: When a person has an undesirable reaction to any product or substance. Examples of undesirable reactions include such things as sneezing, itching, rash, hives, swelling of the face, tongue, lips, or throat.

◆ **Before using any OTC product, personnel must know what the individual's allergies are and be certain that the OTC product does not contain ANY of the substances the person is allergic to. DSP must check each person's allergies every time before a product is used.**

If not absolutely certain that an OTC is safe for the person, staff must ask a licensed healthcare professional (HCP) before using the product. Examples of a HCP include: pharmacist, nurse, or doctor.



On page 4 is an example of information found on the label of Icy Hot®, an over-the-counter (OTC) musculoskeletal pain reliever.

You will notice that information about this product, gives no manufacturer contact phone number. Any questions you have about any product that does not contain a manufacturer's contact number, must be referred to a pharmacist or the person's physician or other appropriate licensed healthcare professional.

Understanding the Label on OTC Drug Products

Products that contain drugs have the specific heading “Drug Facts” on their label. Special attention must be given to all information under “Drug Facts”. Over the Counter products that do not list “Drug Facts” may be used as the label directs.

Always keep the original box or bag of the purchased product. The label must be available at all times when the product is being used. ✓ **To assure the product is used correctly and safely, the label must be read by anyone using the product before every use.** ✓ **Check the expiration date before each use – do NOT use products after the expiration date.** ✓ **Compare individual’s allergy list to ingredients on the label.** ✓ **Keep all medications out of reach of children or others who might swallow them.**

Example: ICY HOT® Pain Relieving Cream

Drug Facts	Drug Facts Continued						
<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; text-align: left;">Active Ingredient</th> <th style="width: 50%; text-align: left;">Purpose</th> </tr> <tr> <td>Menthol 10%</td> <td>Topical analgesic</td> </tr> <tr> <td>Methyl salicylate 30%.....</td> <td>Topical analgesic</td> </tr> </table>	Active Ingredient	Purpose	Menthol 10%	Topical analgesic	Methyl salicylate 30%.....	Topical analgesic	<p>If pregnant or breast feeding. ask a health professional before use.</p> <p>Keep out of reach of children. In case of accidental ingestion, get medical help or contact a Poison Control Center right away.</p>
Active Ingredient	Purpose						
Menthol 10%	Topical analgesic						
Methyl salicylate 30%.....	Topical analgesic						
<p>Uses Temporarily relieves minor pain associated with: •arthritis •simple backache •muscle strains •sprains •bruises</p>	<p>Directions Adults and children over 12 years: ■ apply generously to the affected area ■ massage into painful area until thoroughly absorbed into skin ■ repeat as necessary, but no more than 4 times daily children 12 years or younger: ask a doctor</p>						
<p>Warnings: For external use only</p> <hr/> <p>Allergy alert: If prone to allergic reaction from aspirin or salicylates, consult a doctor before use</p> <p>When using this product ■ Use only as directed ■ do not bandage tightly or use with a heating pad ■ avoid contact with eyes or mucous membranes ■ do not apply to wounds or damaged, broken or irritated skin</p> <hr/> <p>Stop use and ask doctor if ■ condition worsens ■ Symptoms last more than 7 days or clear up and occur again within a few days ■ redness is present ■ irritation develops</p>	<p>Inactive ingredients: carbomer, cetyl esters, emulsifying wax, oleth-3 phosphate, stearic acid, triethanolamine, water (245-110)</p>						

ACTIVE INGREDIENT(S): is the drug in the product and is listed on the drug facts label. For each active ingredient there is a purpose listed. The purpose of all active ingredients is the reason the drug is being used.

USES: Make sure to use the product only for the right purpose as listed on the label and allowed by law.

WARNINGS: Follow all warnings exactly, (such as “Do not get in eyes.”) Pay attention to warnings about when to stop using the product and when to ask a doctor about using the product. You MUST stop using the product and contact the doctor as instructed on the label.

DIRECTIONS: These tell you where, when, how much, and how often to use the product. Directions also state when you can use the product again if still needed. **DO NOT USE MORE of the product than recommended OR MORE OFTEN THAN THE LABEL STATES.**

OTHER INFORMATION: Includes instructions such as proper storage.

INACTIVE INGREDIENTS: These are things in the product that contribute to the delivery, stability, texture, and smell of the product. **It is very important to make sure that NONE of the inactive ingredients are things the person is allergic to.**

QUESTIONS? There is often a number on the label for calling the manufacturer for questions about the product. Questions about an individual’s health or condition must always be directed to their personal licensed health care professional such as a doctor, nurse, pharmacist, specialist, etc.

**OTC Topical Musculoskeletal Drug Administration:
Return Demonstration Skills Checklist**

Knowledge and Skills Demonstrated	✓ Demonstrated	Comments
1. Explains how to involve the individual in the choice of OTC product(s) to be used		
2. States how to confirm allergies before every use, with every person, every time		
3. Demonstrates from a product label how to know: ◀ when to use ◀ where to use ◀ how to use ◀ how much to use ◀ when to repeat use		
4. Demonstrates reading label for warning(s)		
5. Demonstrates checking for the expiration date		
6. Demonstrates reading the label for manufacturer phone number		
7. Can explain and give an example of the requirement to report a problem to the individual's licensed healthcare professional (HCP)		
8. Washes hands and puts on gloves before applying OTC medication		
9. Demonstrates application by using a sample of a non-drug lotion on another person following manufacturer instructions		
10. Demonstrates removing gloves and washing hands after applying the sample non-drug lotion		
11. Demonstrates documentation on a sample form		
12. States that Category 1 Certification must be current to use OTC musculoskeletal medication(s)		
13. States that Category 1 Certification does not authorize use of any other OTC medication without a prescription		

Trainee name: _____ Date: _____
 _____ Instructor initials Instructor Name _____

Comments:

Individual Specific Training Form for Use of OTC Topical Musculoskeletal Medications:

Individual's Name: _____

Person's allergies: _____

Person's preferred product(s):

Product: _____ Reason for use: _____

Product: _____ Reason for use: _____

Product: _____ Reason for use: _____

Product: _____ Reason for use: _____

Person's ability to:

recognize need for product(s) (describe) _____

apply product (describe) _____

report problems with use of the product (describe) _____

Other individual specific information:

Where to document use of product: _____

OTC Meds Musculoskel 9-22-17

IST provided by _____ to _____ on _____

IST provided by _____ to _____ on _____

IST provided by _____ to _____ on _____

IST provided by _____ to _____ on _____

IST provided by _____ to _____ on _____

Pulse Oximetry

Definition of Terms

Apnea – Refers to periods of time when a person stops breathing.

Capillaries – Very small blood vessels close to the surface of the skin.

COPD – Chronic Obstructive Pulmonary Disease. An umbrella term used to describe progressive diseases of the lungs including emphysema, bronchitis, and asthma.

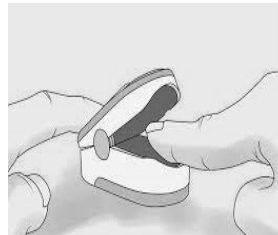
Hemoglobin – An iron rich protein in red blood cells that carries oxygen throughout the body.

Non-invasive – A procedure that does not cause a break in the skin or contact with body mucosa or an internal body cavity; does not require making an incision (cut) into the body or removing any body tissue.

O₂ saturation (Oxygen Saturation) - The percentage of oxygen bound to hemoglobin in the blood. Normal oxygen saturation levels as detected with pulse oximetry are 95% or higher. Oxygen saturations below 92% are generally abnormal and require a call to the appropriate health care professional (HCP)

Oxygenation – The process by which oxygen increases within the body. It may require the use of oxygen therapy.

Pulse oximeter – A clip-on device or adhesive wrap placed on the finger used to monitor the percentage of oxygen in the person's blood. Follow the manufacturer's instructions for which finger / site to use.



Radial Pulse – Pulse found on the thumb side of the wrist.

Sleep Apnea – Refers to periods of time that the person stops breathing while asleep. During these periods of time, the oxygen level can drop significantly, depriving vital organs of adequate oxygen needed to maintain healthy functioning.

SpO₂ - Stands for peripheral capillary oxygen saturation obtained by pulse oximetry. Normal SpO₂ readings are 95% or higher. Oxygen saturations below 92% are generally abnormal and require a call to the appropriate health care professional (HCP), unless individual specific orders say something different.

What is pulse oximetry?

It is a non-invasive method for monitoring the amount of oxygen in the person's blood. Pulse oximetry may be used to **monitor the oxygen level in persons with sleep apnea, COPD, or who are on oxygen therapy.**

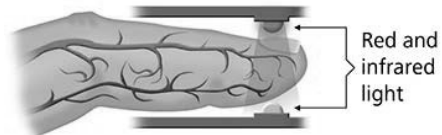
Why is pulse oximetry used?

Since activity increases the body's need for oxygen, pulse oximetry may be used on an as needed (PRN) basis during the course of an activity to determine if the oxygen level drops below 92%. Because oxygen levels often drop during sleep apnea, pulse oximetry may be used to determine if the person maintains adequate levels of oxygen while sleeping.

Use of pulse oximetry in people receiving oxygen therapy helps the doctor determine if the amount of oxygen being delivered is too little or too much. **At rest, blood oxygen should be at least 92% or higher. In healthy people, the oxygen level runs between 95-100%.**

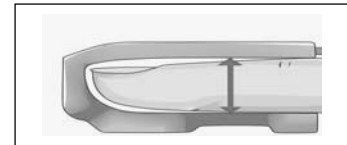
How does a pulse oximeter work?

The oximeter is designed to measure the amount of oxygen in the person's blood by shining two beams of light into capillaries in the finger. The light beams reflect the amount of oxygen in the blood.



What are the risks of using pulse oximetry?

There are minimal risks to the person. It's important to place the oximeter correctly on the finger to ensure an accurate reading. Room light can alter readings, so make sure the clip or wrap does not allow external light to enter. If the person looks okay, but the reading is low, check the radial pulse to see if the pulse rate matches the rate on the pulse oximeter. Reposition the probe to get a more accurate reading. An accurate reading is important for the person to get the right care.



Care and Storage of Pulse Oximeter

- ◀ Keep the battery charged at all times.
- ◀ Keep the probe clean. Dirt and dust can block light emitted by the oximeter, leading to a faulty reading. Clean the probe with a damp paper towel to remove dirt; use an alcohol swab to remove germs from the probe.
- ◀ Store the oximeter where it won't get moved around or accidentally dropped or damaged.
- ◀ Disconnect all wires properly.

WARNING:

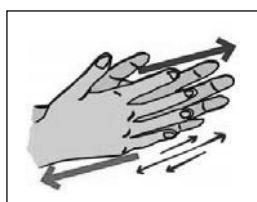
If the person has any breathing difficulties or has decreased alertness, get medical help immediately even though the oximeter reading might be in the normal range.

Are there any issues that should be considered when using pulse oximetry?

- ◄ **Smoking** affects the oxygen levels in the blood. A higher level of oxygen may be reported than is actually present because smoking increases carbon monoxide in the blood and the oximeter does not distinguish between oxygen and carbon monoxide.
- ◄ **Dark nail polish and artificial nails** can interfere with the oximeter's ability to accurately detect the level of oxygen in the blood. Remove nail polish before using oximeter.
- ◄ **Dark pigment** on the finger can alter the strength of the light beam through the finger.
- ◄ **Cold hands** can decrease the flow of blood to the capillaries in the finger. **Warm the hands** before applying the oximeter to the finger.
- ◄ **Dirt on the hands** can interfere with the functioning of the oximeter. Wash hands before using the oximeter.
- ◄ **Bright light** can interfere with getting an accurate reading. Do not use the oximeter in sunlight and turn bright lights away from the oximeter.
- ◄ **Moving around** while the oximeter is measuring your oxygen level can cause an inaccurate reading. Sit still while oximeter is reading your oxygen level.
- ◄ **Improper fit of oximeter** will give an inaccurate reading.
- ◄ **If you want to get an "off oxygen" SpO₂ for a person who has been on oxygen**, the person must be taken off oxygen for at least 15 minutes before an "off oxygen" reading is taken.
- ◄ **The home oximeter** reading should be checked during a doctor's appointment. Take the person's oximeter to the doctor's appointment to check its accuracy against the readings obtained in the doctor's office.



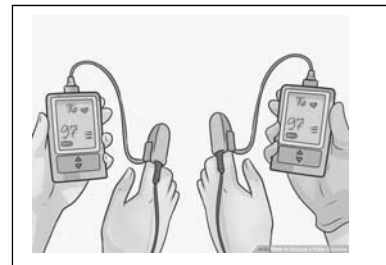
Remove Nail Polish



Warm cold hands



Wash person's hands to remove dirt



Check your readings against readings of doctor's device

Universal Precautions

It is not necessary to wear gloves when measuring oxygen levels using a pulse oximeter.

Be sure to wash your hands before and after the procedure. Be sure to use an alcohol swab on the finger probe to kill any germs on the probe after every use.

Checklist for Monitoring Pulse Oximetry

Procedure Steps

- _____ 1. Choose a sensor appropriate to the person's age, size and weight, and the desired location.
- _____ 2. If the person is allergic to adhesive, uses a clip-on probe sensor.
- _____ 3. Clean and dry the site.
- _____ 4. If using an adhesive wrap, remove the protective backing and wrap around appropriate finger.
- _____ 5. When attaching the probe, make sure that the photo-detector and light-emitting diodes on the probe sensor face each other.
- _____ 6. Connect the sensor probe and turn it on.
- _____ 7. Wait 10-30 seconds until the digital display stops changing and then read the numbers.
- _____ 8. Remove the probe sensor and turn off the oximeter when monitoring is no longer necessary.
- _____ 9. Document results and report any out of range findings to a HCP (health care professional).

(Adapted from FA Davis Co. 2007. Wilkinson & VanLeuven. Procedure Checklist for Fundamentals of Nursing.)

Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:

CPAP / BiPAP

Definition of Terms

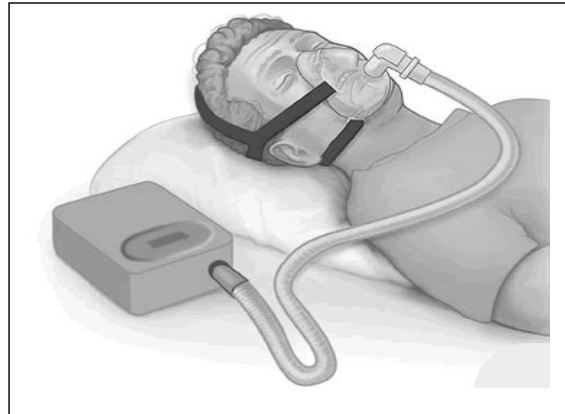
Airway – The passage through which air passes to the lungs and carbon dioxide (CO₂) passes out of the lungs. It consists of the nose, mouth, throat, trachea, and lungs.

Apnea – Pauses in breathing. Usually happens while sleeping.

CPAP / BiPAP – Devices for preventing sleep apnea by delivering pressurized air to the lungs.

(Continuous Positive Airway Pressure)
(Bi-level Positive Airway Pressure)

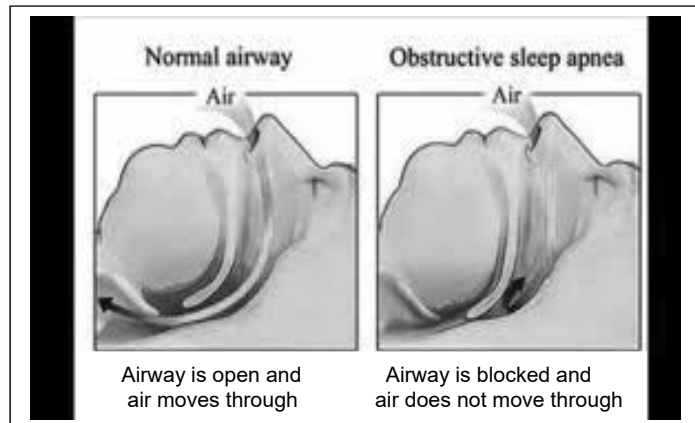
Blood oxygen levels – The amount of oxygen in the blood at any given time.



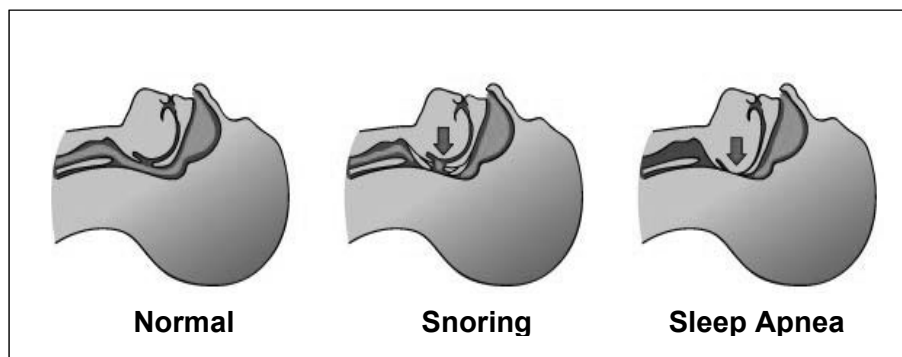
Obstruction – A blockage.

Obstructive sleep apnea – Pauses in breathing during sleep caused by changes in the position of the upper airway when laying down.

Sleep Apnea – Pauses in breathing during sleep.



Snoring – Snorting or grunting noises caused by an obstruction in the airway.



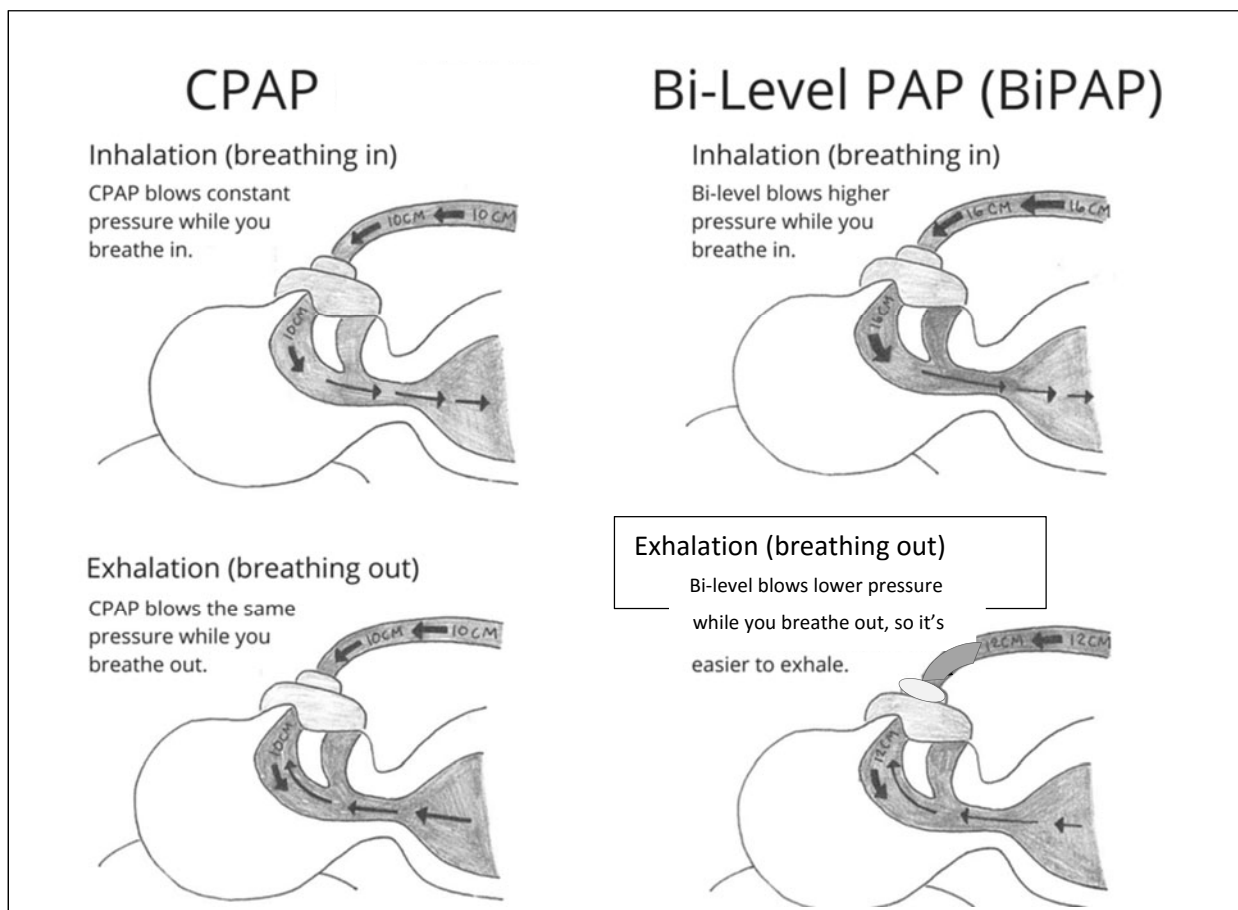
CPAP / BiPAP - COMMON TREATMENTS FOR SLEEP APNEA

Obstructive sleep apnea affects thousands of people every night. The most common symptom people have is daytime sleepiness. At night, the person stops breathing for periods of time, resulting in poor quality sleep. Because the person is asleep, they have no awareness that they are not breathing for periods of time. If untreated, sleep apnea can lead to irregular heart beats, and increase the risk of heart attack, stroke, high blood pressure, diabetes, and accidents.

The most common treatment for sleep apnea is use of either a BiPAP or CPAP machine that delivers positive air pressure through a face mask or other device during sleep. Room air is usually used, but some persons may require oxygen.

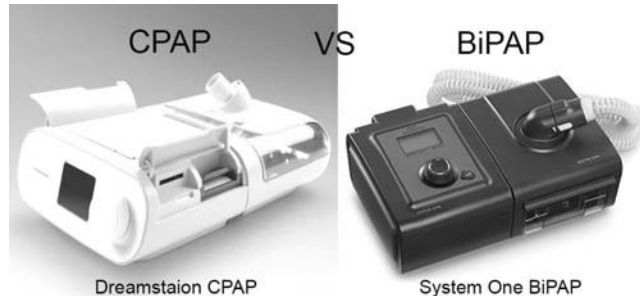
Be sure to follow the specific instructions for the individual and their equipment. If the person has difficulty adjusting to their sleep apnea device, contact the equipment supplier for assistance. Be sure that hoses and masks or other face equipment is replaced when in disrepair.

The figure below shows the subtle difference in how the CPAP and BiPAP delivery systems work.



What are the risk factors for sleep apnea?

- ◀ Being male
- ◀ Being overweight
- ◀ Having a thick neck
- ◀ Aging
- ◀ Having high blood pressure
- ◀ Family history of sleep apnea
- ◀ Having diabetes



How do these devices work?

- ◀ These devices are programmed by a respiratory therapist to deliver air under the right amount of pressure to keep the person's airway open during sleep.
- ◀ The pressurized air is delivered through a face mask or other device such as nose pillows or nose mask to prevent episodes of sleep apnea and allows the person to get a restful sleep. The face device must fit snugly to allow pressurized air to enter the airway.
- ◀ The machine pushes the air through a water well to deliver moist air that prevents drying of the airway.
- ◀ All machine settings are preprogrammed by the equipment supplier. Direct service personnel will not be making any adjustment to the machine settings.
- ◀ Some people may require oxygen delivered through the machine instead of normal room air. Oxygen is an inhaled medication. All procedures for the administration of oxygen must be followed.



Nose pillow with head gear

Who should use these devices?

A sleep study may be done on anyone with a history of snoring, waking up gasping for air, excessive day time sleepiness or who stops breathing for periods of time during the night. If they are diagnosed with sleep apnea, the doctor may prescribe one of the PAP (positive air pressure) devices to treat the problem. The pressured air is delivered through a face mask or other devices such as nose pillows or nose mask.

What are the benefits of using CPAP / BiPAP?

- ◀ Elimination of snoring
- ◀ Elimination of day time sleepiness
- ◀ Improved quality of sleep
- ◀ Decrease in or prevention of high blood pressure

Are there any adverse side effects from using CPAP or BiPAP?

Some peoples may experience:

- ◄ Sneezing
- ◄ Runny nose
- ◄ Nasal congestion
- ◄ Excessive dreaming when first using the device
- ◄ Interrupted sleep from improperly fitting mask or other face devices
- ◄ TMJ disorders (Temporomandibular joint pain; pain in the jaw joint)
- ◄ Abdominal bloating
- ◄ Dry nose and sore throat
- ◄ Irritation of the eyes and the skin on the face

What are the potential problems?

- ◄ Interruption in air flow from a clogged air filter
- ◄ Fire hazard or electrical shock from frayed electrical cords
- ◄ Mineral deposits in the system from failure to use distilled water in the humidifier well
- ◄ Growth of bacteria from improper cleaning of the component parts that could lead to respiratory infections
- ◄ Odor and growth of bacteria or mold in hoses that are improperly stored
- ◄ Irritated skin from an improperly fitting mask or other face devices
- ◄ If the machine malfunctions, seek professional assistance

How to clean and maintain the CPAP / BiPAP

- ◄ Follow the manufacturer's instructions
- ◄ Hang the hose over a hook to allow air to freely flow through it – do not coil it when not in use
- ◄ Wipe the outside of the machine daily with a damp cloth to keep it dust free
- ◄ Clean the mask or other face equipment daily as directed by the manufacturer
- ◄ Replace any worn or non-working parts as directed by the manufacturer
- ◄ **ONLY** use distilled water NOT tap water in the water well
- ◄ Empty the water well daily, wash it and let it air dry
- ◄ Change the filter per manufacturer's instructions



Check list for use of CPAP / BiPAP machine

- _____ 1. Place the machine on a level surface near the bed.
- _____ 2. Place the machine at least 12 inches away from anything that could block the vents (curtains, bedspread, etc.).
- _____ 3. Place the machine lower than the level of the bed so any accumulation of water will drain back toward the machine, not the mask.
- _____ 4. Plug the machine into an outlet. Do NOT use an extension cord.
- _____ 5. Fill the water well with distilled water only. No tap water.
- _____ 6. Place the water well into the machine per manufacturer's instructions.
- _____ 7. Wash your hands and put on gloves.
- _____ 8. Put the hose of the face device into the hose port on machine.
- _____ 9. Position face piece (mask, nose pillow, etc.) on face.
- _____ 10. Fasten / adjust headgear on the person's head so that the face device fits snugly.
- _____ 11. Turn the unit on. If using oxygen, turn on CPAP / BiPAP unit first, before turning on oxygen flow.
- _____ 12. Have the person breathe deeply until pressured air begins to flow.
- _____ 13. Have person breathe normally once pressured air is flowing. Make sure no air is leaking out of the mask or nasal pillows. If it is, readjust the mask or nasal pillows and headgear.
- _____ 14. When the person awakens in the morning, turn off the machine. If using oxygen, turn off oxygen first before turning off the machine.
- _____ 15. Remove the face gear and clean per provider's instructions.
- _____ 16. Clean the machine, and hose per supplier's instructions and hang hose to dry.

Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:

Percussion Vest

Definition of Terms

Airway clearance – Movement of mucus out of the lungs by coughing or other applied techniques to reduce airway obstruction, prevent the likelihood of infection and improve lung function.

Alveoli – Tiny sac-like structures at the end of the bronchial tree that allow carbon dioxide and oxygen to move between the lungs and the bloodstream.

Bronchi – The airway branches that carry air from the trachea to the alveoli.

Chest wall oscillation – Application of an external vibration device to the chest to help clear airways of mucus.

Chronic – Persistent, long-lasting, difficult to get rid of.

Hemoptysis – Coughing up blood.

Lung airways – The passages in the lungs by which air enters and leaves. These passages consist of the trachea and bronchial tree.

Percussion vest - A device worn over the chest area designed to vibrate the chest to loosen and remove mucus from the airways.

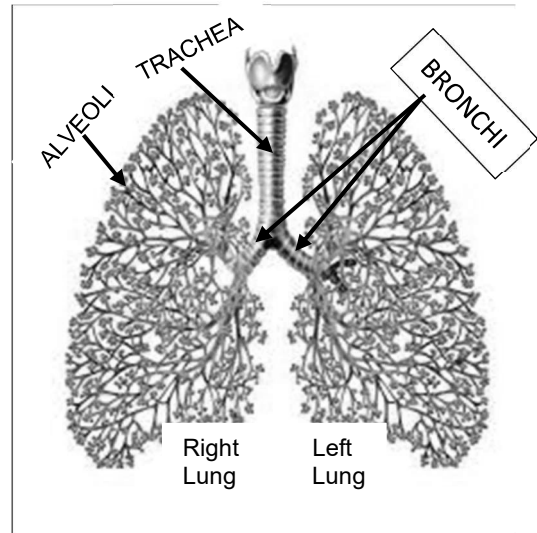
Respiratory Distress – Difficulty breathing.

Symptoms include:

- ◀ Agitation
- ◀ Increased respiration rate
- ◀ Difficult to awaken
- ◀ Increased pulse rate
- ◀ Complaint of “air hunger” or difficulty breathing
- ◀ Increased effort to breathe (gaspings)
- ◀ Changes in skin color (pale)
- ◀ Face or lips become pale, blue, or gray

Sputum – Mixture of saliva (spit) and mucus coughed up from the respiratory tract.

Trachea – Windpipe; 4-6 inch tube connecting the back of the throat to the bronchi.



Why would a person use a Percussion Vest?

There are more than 35 million persons in the United States with debilitating diseases that affect their ability to clear their airways of mucus build-up. Using a mechanized vest to vibrate the chest is a way to **loosen mucus in the airways so it can be cleared**, promoting lung expansion, improved gas exchange and oxygenation.

The percussion vest assists the movement of mucus (phlegm) from the smaller parts of the lungs to the larger airways, so the person can more effectively cough up mucus from their airways. A person who cannot cough effectively may need oral suctioning with this treatment.

Diagnoses often associated with the need for percussion vest assistance include:

- ◄ Cystic fibrosis
- ◄ Chronic Obstructive Pulmonary Disease (COPD)
- ◄ Chronic asthma
- ◄ Muscular Dystrophy (MD)
- ◄ Limited body mobility (such as paraplegia or quadriplegia)

What are some things that should be considered when using vest therapy?

- ◄ Treatments should be done as directed.
- ◄ If the vest causes itching, have the person wear thicker clothing under the vest.
- ◄ At least once a year, the vest and vest-machine must be evaluated to assure proper fit of the vest and proper functioning of the machine.
- ◄ It's best to do the treatment before eating or to wait at least one hour after eating to avoid stomach problems.
- ◄ If the person has an upset stomach, nausea or vomiting, hold the treatment and contact a licensed healthcare professional (HCP).
- ◄ Do not use the vest if a person has broken ribs, is coughing up blood, or has a head or neck injury. Contact a HCP.
- ◄ Contact a HCP if the person has fallen or been in an accident.



How to use the vest

- ◄ Be sure the vest fits correctly. It should be placed over a tee shirt or other thin layer of clothing. Be sure that the clothing is not bunched up under the vest.
- ◄ Be sure the shoulder straps (if applicable) are of proper length to allow the vest to cover the upper chest without causing pressure on the armpits due to being too short.
- ◄ The bottom of the vest should come to just above the hip bones.
- ◄ Adjust the fasteners so that when the person takes a deep breath, there is room for a hand to fit between the vest and the chest.
- ◄ Connect the tubing to the generator and the ports on the vest.



- ◄ Sit the person upright if possible, or make sure the head of the bed is elevated.
- ◄ Turn on the machine's main power switch. **DO NOT change frequency, pressure, or time settings when starting the machine. These are preset for each person.**



- ◄ As the vest inflates, firmly grasp the vest at the bottom and pull down to prevent it from riding up.
- ◄ The person's speech should be "choppy" indicating the set pressure is effective in creating airway vibration.
- ◄ **Watch the person during the treatment or stay within hearing distance and check the person at least every 5 minutes.**
- ◄ Let the machine run for as long as it is set to run. Turn off machine when it stops.
- ◄ Stop the machine if the person voices or shows signs of discomfort. Report any problems to the person's licensed healthcare professional.
- ◄ After the machine is turned off, have the person cover their mouth (assist as needed), prompt them to cough to clear airway. Follow the instructions you were given for how long the person is to cough.
- ◄ You may be instructed to perform oral suctioning instead of or in addition to having the person cough.
- ◄ After the treatment, remove hoses and vest. Clean the equipment as instructed.
- ◄ Have the person wipe their face and clean their hands after treatment. Assist as necessary.

Report to the person's licensed healthcare professional right away:

- ◄ Any increased coughing, nasal drainage or stuffiness.
- ◄ If treatment was not completed for any reason (such as illness, vomiting, diarrhea, refusal, mechanical problems).

Are there any potential adverse side effects with percussion vest therapy?

The person may experience:

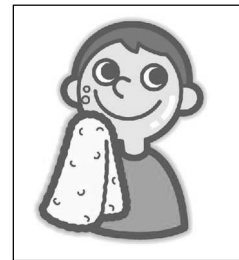
- ◀ Vomiting.
- ◀ Bronchospasms (wheezing, shortness of breath).
- ◀ Decrease in oxygenation or signs of respiratory distress that do not go away.
- ◀ Pulmonary hemorrhage (coughing up blood, shortness of breath).



If any of the above side effects are observed, stop the therapy and

- ◀ Inform a licensed healthcare professional right away.
- ◀ Document.

Infection Control



- ◀ Wash hands and put on gloves at the beginning of treatment.

- ◀ Periodically clean the vest using a disposable sanitizing wipe.

- ◀ Have the individual clean their face and hands after coughing or suctioning. Assist with these as needed.

Removing Gloves Safely



Peel one glove off from top to bottom. Hold the removed glove in your gloved hand.



Using two fingers, peel the other glove from the wrist.

- ◀ Remove soiled gloves and put them in a lined waste container.
- ◀ Wash hands.

Checklist for using a Percussion Vest

- _____ 1. You **MUST** receive training on the use of a person's percussion vest before using it with them.
- _____ 2. Wash hands and put on gloves.
- _____ 3. Prepare percussion vest equipment and suction machine if suction will be used.
- _____ 4. Instruct the person about use of the vest (body position; length of treatment).
- _____ 5. Encourage the person to relax, breathe normally and cough when they feel like it.
- _____ 6. Place the vest on the person and check the fit of vest. It should be snug, but allow a hand to be inserted between the vest and chest. The vest should not sit on or below the hip bones.
- _____ 7. Help the person into a comfortable position of their choice. Be sure their upper body is elevated.
- _____ 8. Connect the tubing to the vest and generator per instructions.
- _____ 9. Turn generator on by pressing "start." Frequency and time are pre-set – **DO NOT** adjust.
- _____ 10. As the vest inflates, firmly grasp it at the bottom and pull it down.
- _____ 11. Stay within auditory range and visually monitor the person at least every 5 minutes during the treatment time. Stop the treatment immediately if the person is upset or in pain.
- _____ 12. When the treatment is done, have the person cough or suction as instructed by the person's licensed healthcare professional.
- _____ 13. Remove gloves, wash hands.

3-24-17 / 9-22-17

Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:

Application of Compression Hose

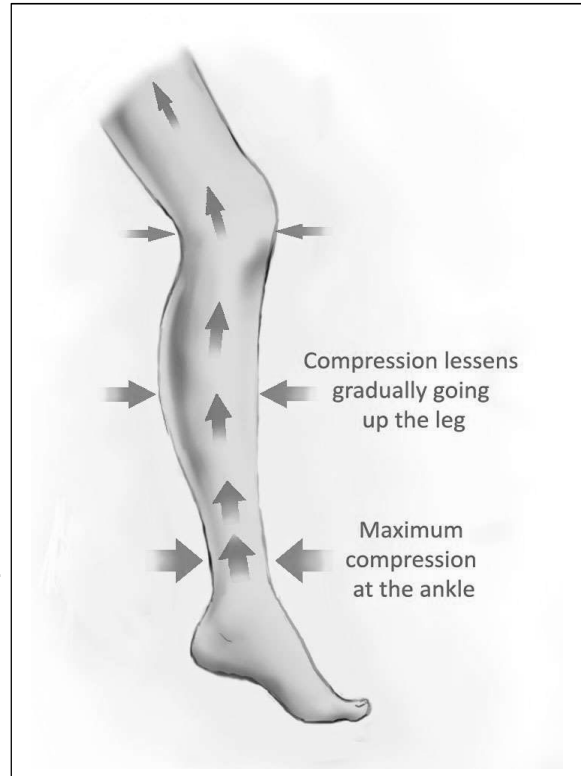
Definition of Terms

Compression - to squeeze; to place a device on the leg to squeeze the muscle against the veins in order to increase circulation and prevent blood clots, phlebitis, edema.

Compression hosiery – knee high elastic socks worn on the leg to compress the tissues in the leg to promote upward movement of blood through the veins.

Deep Vein Thrombosis (DVT) – Blood clot found in the deep veins in the lower legs.

Edema – Swelling from fluid collecting in an area. Most often found in the hands, lower legs and feet.



Lymphedema – Faulty draining of fluids into the tissues due to inability of the lymphatic system to drain excess fluids from the tissues.

Lymphatic System – A network of tissues and organs that help rid the body of toxins, waste, and other unwanted materials.



Phlebitis – Inflammation of the walls of a vein.



Pitting edema – A significant collection of fluid in a body area that can be seen as a temporary impression in the skin that stays after pressure has been applied.



Spider veins – Visible capillaries just beneath the skin.

(Definition of Terms cont.)

Thrombosis – Blood clot in a vein or an artery.

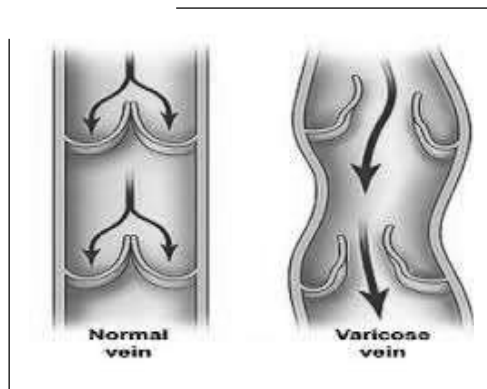
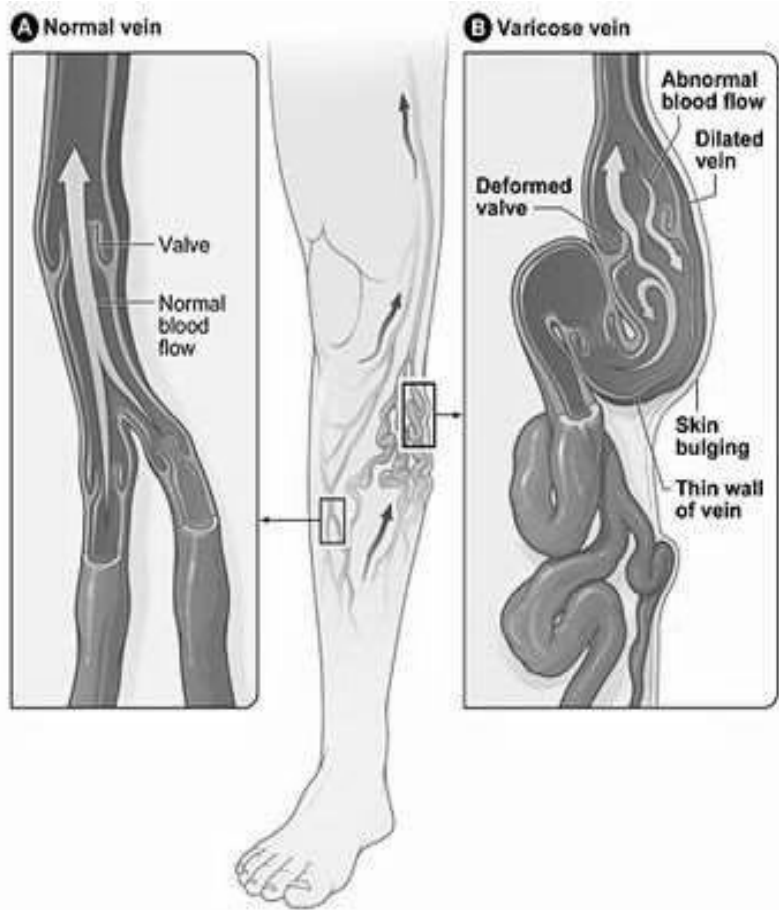
Thromboembolism – A blood clot that has detached from the wall of a blood vessel and travels through the circulatory system. It can lodge in any vessel in the body.

Valve – A mechanism in a blood vessel that allows for fluid/ blood to travel through the circulatory system. Valves in the veins allow for blood and other fluids to flow upward toward the heart. As fluid is pushed upward by the massaging action of the muscles squeezing the vessel (veins), valves in the veins close to keep blood from flowing backward and collecting in the tissues.

Veins – system of branching vessels or tubes that carry oxygen - depleted blood from various parts of the body back to the heart and lungs to get more oxygen.

Venous insufficiency – Failure of the veins to adequately circulate blood, especially from the lower limbs.

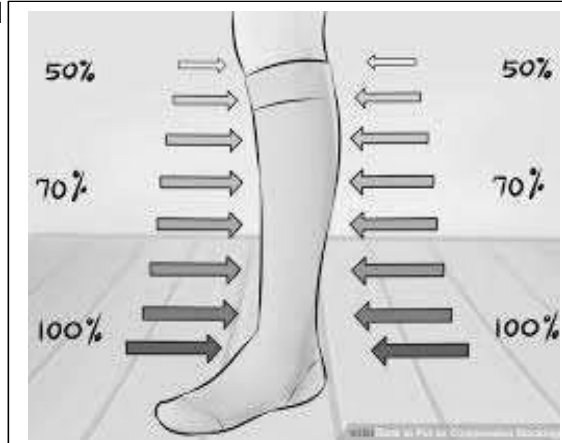
Varicose veins – Veins that have become enlarged and twisted



Application of Compression Hose

What are compression hose (TED® hose) and what do they do?

Compression hose are a special kind of prescribed elastic leg wear designed to squeeze the legs to help move blood upward. This prevents swelling. Knee - high compression hose are tightest at the ankles, becoming less tight toward the knees.



Why are compression hose worn?

They may be prescribed if a person has a condition that causes poor blood flow to and from their legs.

When are compression hose worn?

People who are bed-bound might wear compression hose. However, compression hose are generally worn when the individual is up and about. They are applied first thing in the morning, preferably before the person gets out of bed, before fluid has had a chance to accumulate in the tissues. If the person has been up already, have the person lay down for 15 minutes with leg(s) raised before applying the compression hose.

How often should compression hose be laundered?

Hand wash daily. Do not place in a dryer. Follow manufacturer's instructions for care. Most people have 2 pair of compression hose so that while one pair is drying, the other is available for use. **Do NOT put wet or damp hose on a person.**

Why are compression hose so hard to get on?

They are made to fit the affected leg(s) snugly. If the hose are too loose, they cannot apply the pressure needed to squeeze the leg muscles enough. Do not put the hose on wet skin. The hose will go on easier if the person is laying down with their legs raised. Special devices are available to assist the person to put on their compression hose.

What are the potential problems associated with wearing compression hose?

If improperly applied, compression hose can cause tissue damage, circulation problems, worsen edema, or cause a superficial clot to travel. If compression hose are too small, they can cut off blood flow in the legs. If someone gains or loses a substantial amount of weight, the person needs to be remeasured and refitted for compression hose.

Compression hose should never be used if the person has any wounds on the leg, skin infection, lack of feeling in the limb, or is unable to get out of the bed and move around. Notify the appropriate health care professional if the person cannot wear the hose as prescribed.

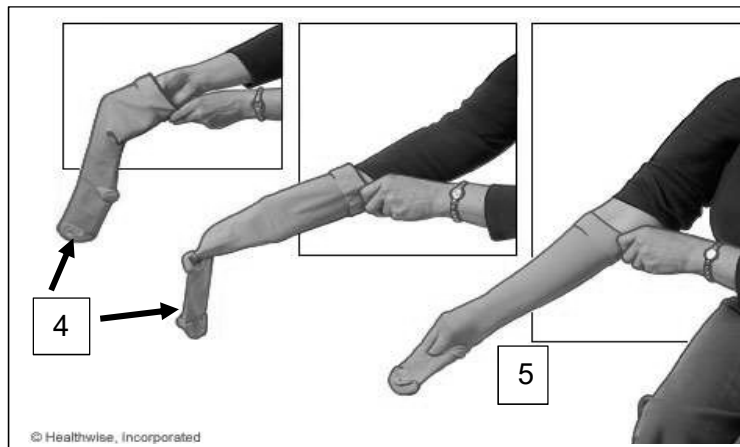
Never fold the top of the hose down. This will cause harm to the person's circulation.

Procedure for Application of Compression Hose

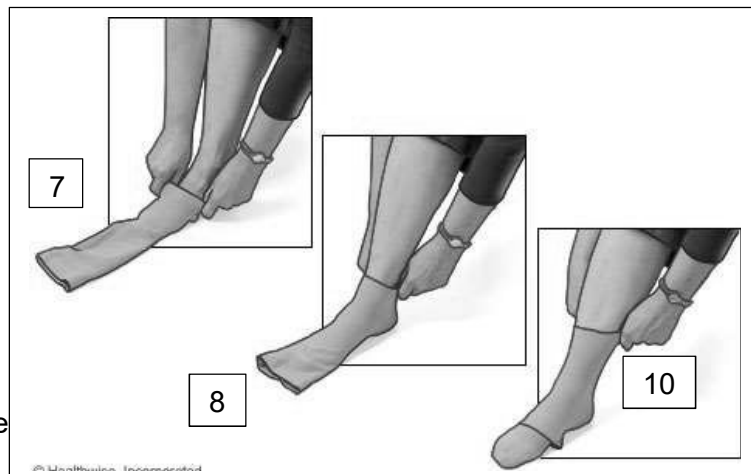
1. Wash your hands
2. Have person recline on bed
3. Be sure feet and legs are clean and dry
4. Place your hand in top of clean hose



5. Pull hose up your arm until your hand is in the foot of the hose
6. Roll hose inside out, down over your arm to your hand while keeping a grip on the inside of the toe
7. Grasp edges of hose and place person's foot into toe of hose



8. Work the foot of the hose over the person's foot. Be sure the toe and heel are in place
9. Smooth material over foot. Ensure there are no ridges or bunching
10. Grasp edge of hose and pull it up over the ankle and calf
11. **If knee-length**, be sure hose top is 1-2 inches below the crease at the back of the knee; **NEVER** roll the top of the hose down



12. **If thigh length**, pull the hose over the knee and over the thigh until it is 1-3 inches below the buttocks; **NEVER** roll the top of the hose down
13. Be sure the hose fits smoothly over the skin; has **NO** wrinkles or folds; if there are wrinkles or folds, roll the sock back to below the wrinkle and re-work the sock back up the leg
14. Wash your hands
15. Document on the MAR/TAR

Checklist for Application of Compression Hose

- _____ 1. Wash hands.
- _____ 2. Check MAR / TAR for current order.
- _____ 3. Note any special instructions on the MAR / TAR.
- _____ 4. Gather the equipment you need. Make sure the hose are dry.
- _____ 5. Have person recline on bed and explain the procedure.
- _____ 6. Be sure feet and legs are clean and dry and there are no open sores, skin infections or other signs the hose should not be applied. Put on gloves if person has toe fungus.
- _____ 7. Place your hand in the top of clean hose.
- _____ 8. Pull hose up your arm until your hand is in the foot of the hose.
- _____ 9. Roll hose inside out down over your arm to your hand while keeping a grip on the inside of the toe.
- _____ 10. Grasp edges of hose and place person's foot into toe of hose.
- _____ 11. Work the foot of the hose over the person's foot. Be sure the toe and heel of hose is in place.
- _____ 12. Smooth material over foot. Ensure there are no ridges or bunching.
- _____ 13. Grasp edge of hose and pull it up over the ankle and calf.
- _____ 14. Be sure the hose top is 1-2 inches below the crease behind the knee or 1-3 inches below the buttocks.
- _____ 15. Be sure the hose fits smoothly over the skin. No wrinkles or folds. If there are wrinkles or folds, roll the hose back to below the wrinkle and re-work the hose back up the leg.
- _____ 16. Repeat procedure for opposite leg if the hose are ordered for both legs.
- _____ 17. Wash your hands.
- _____ 18. Document on the MAR/TAR.
- _____ 19. Report any problems to appropriate Health Care Professional.

Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:

Cough Assist Insufflator - Exsufflator

Definition of Terms

Airway – The route by which air reaches the person's lungs; it consists of the nose, mouth, throat, trachea (windpipe) and bronchial tree.

Airway clearance – Movement of mucus out of the lungs by coughing or other applied techniques to reduce airway obstruction, prevent the likelihood of infection and improve lung function.

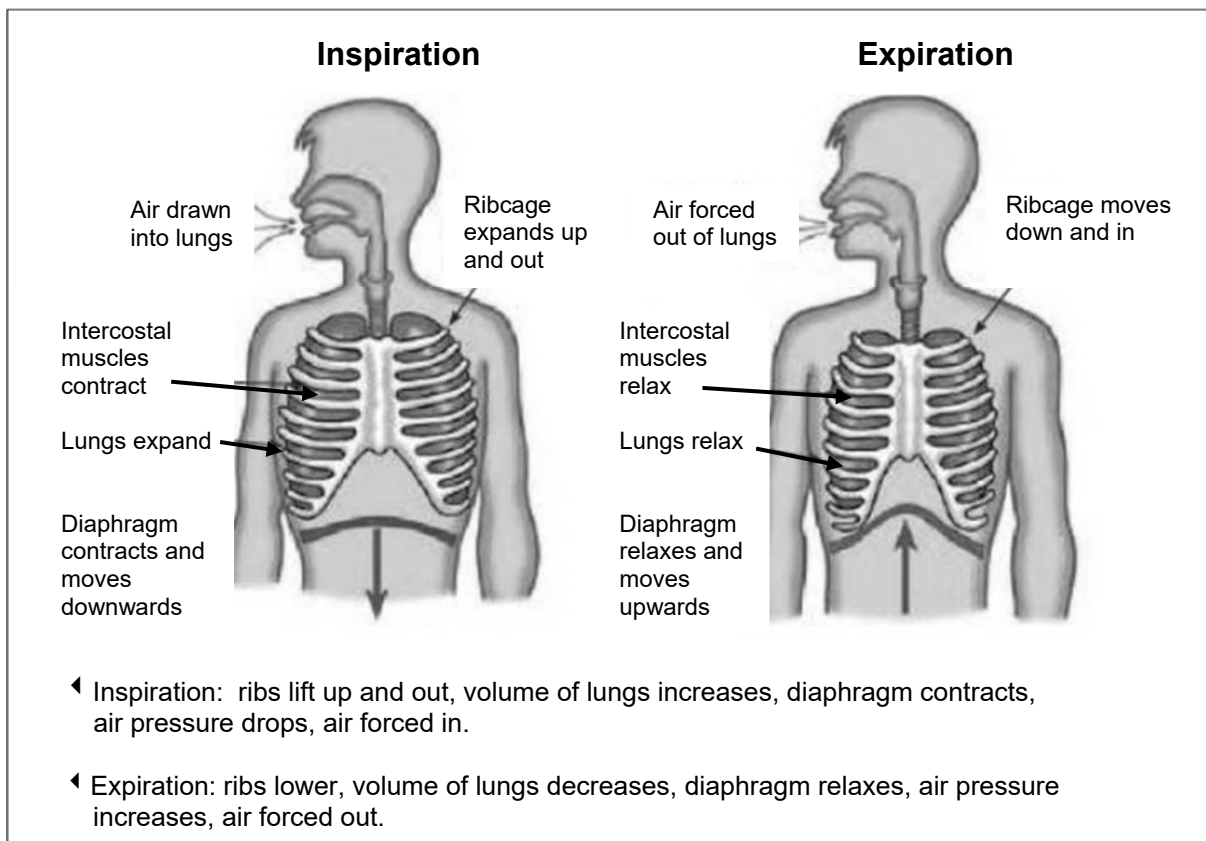
Cough Assist Machine – This device forces pressurized air into the lungs on inspiration to help a person breathe deeper and then applies negative pressure on exhalation to pull any loose secretions into the mouth and upper airway.



Breathing Cycle – 1 Inhalation + 1 Exhalation = a breathing cycle.

A normal rate of breathing should be 12-20 times per minute. If breaths at rest are fewer than 8 or more than 25 breaths per minute, seek urgent or emergency care.

Illustration of Breathing Cycle



(Definition of terms continued)

Expiration/Exhalation – Movement of air out of the lungs; chest falls during expiration.

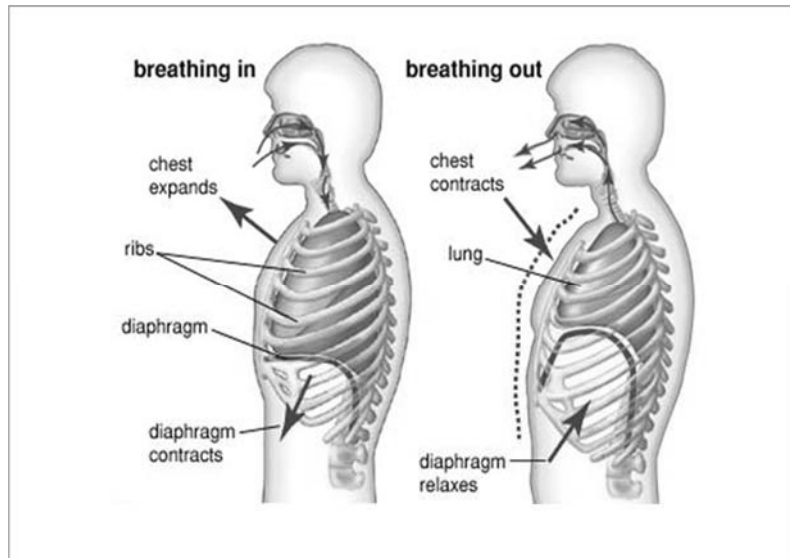
Exsufflation – Mechanical application of negative pressure to pull air out of the lungs.

Inspiration / Inhalation –

Taking a breath in; chest rises during inspiration.

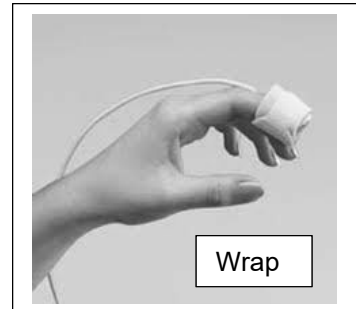
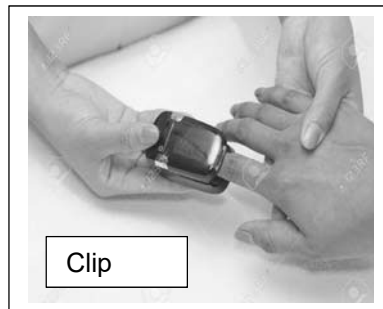
Insufflation – Mechanical application of positive pressure to push air into the lungs.

Mode – A machine may be operated by manual or auto mode. Auto mode allows the device to automatically function on pre-set settings. Manual mode expects the person using the device to adjust settings.



Oxygen saturation – The percentage of oxygen in the blood. Normal oxygen saturation levels are 95% or higher. Oxygen saturations below 92% are generally abnormal and require a call to the appropriate health care professional, unless individual specific orders say something different.

Pulse oximeter – A device with a clip or wrap placed on the finger (or sometimes ear) to measure the amount of oxygen in the blood (oxygen saturation).



Secretions – Substances that are produced by a gland or organ. For example, mucus is produced by glands lining the airways to keep its structures moist and lubricated. If the mucus becomes too thick and sticky, or builds up, it makes it difficult for the person to breathe properly.

Sputum – A mixture of saliva (spit) and mucus coughed up from the respiratory tract.

Treatment Cycle: One cycle is when the machine pushes air into the lungs **and** pulls air out of the lungs.

Why is coughing an important body function?

Coughing is essential to life. The mucous layer in the airways traps dirt and bacteria. Coughing allows the airways to expel this mucus and prevents infection.



What is a cough assist insufflator and what does it do?

It is a machine that helps people with a weak or ineffective cough bring up secretions so that air can move freely in and out of the lungs. Regular use of the insufflator reduces the likelihood of pneumonia caused by collection of secretions in the lungs, reducing the need for hospitalization. The in-exsufflator machine helps people with weak chest muscles get:

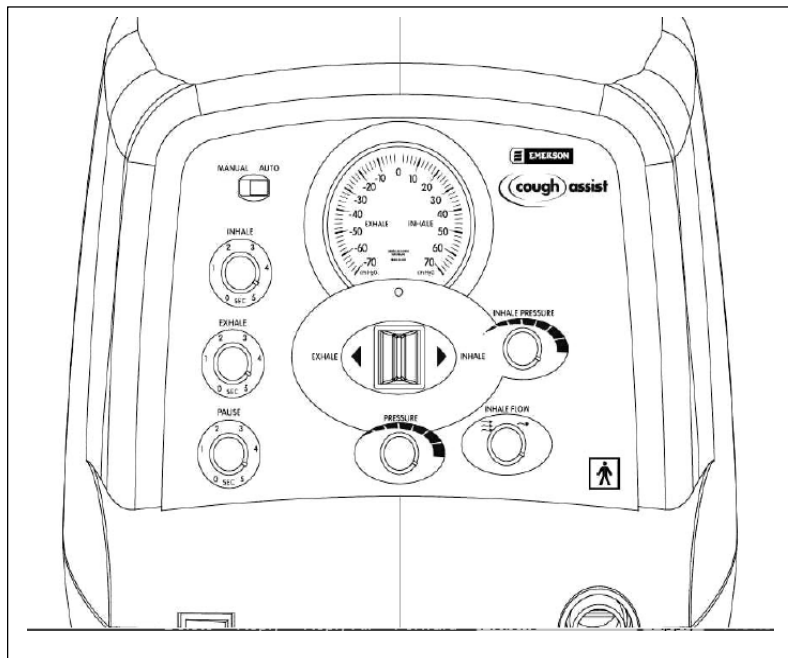
- ◀ a deep breath
- ◀ a simulated strong cough

How does the cough assist insufflator – exsufflator machine work?

This machine simulates a natural cough by gradually delivering a large volume of air when the person breathes in. Once the lungs are inflated (expanded), the machine quickly reverses the positive pressure in the lungs to a negative pressure to pull secretions out of the airways.

Treatments are prescribed by numbers of cycles. A push of air in plus the pull of air out is one cycle.

With the assistance of the machine, the person's cough is stronger and thus more effective in removing built-up secretions that have collected in the airways.



Many people report that breathing is much easier for them after using a cough-assist device. This is because removing excess secretions decreases the resistance to airflow.

Who benefits from using a cough assist insufflator - exsufflator machine?

People with weak chest muscles that make it difficult for them to breathe deeply and cough vigorously enough to remove excess mucus from their lungs. Weak chest muscles can be caused by spinal cord injuries, cerebral palsy, muscular dystrophy, and other debilitating diseases.

What are the advantages of using a cough assist insufflator – exsufflator machine?

- ◄ Prevention of infections such as pneumonia
- ◄ Keeping the airways clear allowing for easier breathing
- ◄ Can be used with a mouthpiece, mask, or tracheostomy tube adapter
- ◄ Brings secretions into view so that removal can occur with oral or less invasive suctioning

Who would write the prescription and instructions for use of the cough assist insufflator - exsufflator?

- ◄ A physician will write the order for using the cough assist in-exsufflator
- ◄ If the physician indicates that an insufflator - exsufflator is needed, a respiratory therapist will evaluate the individual's need and provide directions for settings and usage
- ◄ Directions will include machine settings to be set by the equipment supplier
- ◄ Certified staff may **NEVER** adjust the machine settings. Only the equipment supplier is allowed to adjust the settings
- ◄ If there is any problem with the settings or the equipment, call the equipment provider immediately to address the issue. (They are on call 24 hours a day)
- ◄ Directions for unlicensed staff will include only the number of cycles per treatment and the number of treatments per day

Are there any safety precautions?

- ◄ Check ports for airflow to ensure they are open and working
- ◄ Check all settings before each treatment. The machine should be in “auto” mode at all times.
- ◄ Look at the pressure gauge to see that pressures are reaching the desired settings with cycles; if not, contact the equipment provider
- ◄ Allow the individual to rest and recover between cycles
- ◄ Keep machine away from curtains, blankets or any heat-generating device
- ◄ Do not attempt to repair the machine yourself – seek a professional repair service
- ◄ Keep machine away from water – never clean by immersing in water
- ◄ Use a grounded outlet only

- ◄ **Never use the machine until you have received proper training and fully understand how to use it.**
- ◄ **Be sure to follow the prescription information precisely**

How is the cough assist insufflator – exsufflator cleaned and maintained?

Be sure to follow the manufacturer’s directions for cleaning and maintenance.

Generally speaking, you should plan to:

- ◊ Wipe the outside of the machine with a damp cloth daily
- ◊ Thoroughly wash the hoses and mask with mild soap and water daily. Allow all parts to air-dry. Be sure all parts are completely dry before each use
- ◊ Replace any torn, worn, or broken parts that no longer work as they should
- ◊ Do **NOT** wash the bacterial filter. Leave it in place as long as it is not blocked by sputum or trapped moisture. Replace it per manufacturer’s instructions
- ◊ If the pressure gauge does not return to zero when the device is turned off, refer to the manufacturer’s instructions for what to do



Checklist for Cough-assist Insufflator-Exsufflator

How to use the Cough-assist Insufflator - Exsufflator

- _____ 1. Plug electrical cord into power socket and into back of machine.
- _____ 2. Wash hands and put on gloves.
- _____ 3. Insert the tubing into the cough assist machine.
- _____ 4. Attach the face mask to the other end of tubing.
- _____ 5. Position the person as instructed.
- _____ 6. If oral suctioning is required after exsufflation, prepare the oral suction machine.
- _____ 7. Turn on the cough machine using the power switch.
- _____ 8. Check the pressure by putting hand over mask. Check pressure gauge to ensure correct pressures are registering on the gauge for both inspiration & expiration.
- _____ 9. Check to be sure the machine is in auto mode.

Now You Are Ready to Use the Cough-assist Insufflator - Exsufflator With the Person

- _____ 1. Make sure the person is comfortable and ready for the treatment.
- _____ 2. At the end of expiration or just at the start of inspiration, seal the mask firmly around the person's mouth and nose.
- _____ 3. Instruct the person to take a deep breath in with the machine during the inspiration and to cough strongly during expiration. (If they are able)
- _____ 4. After each cycle (inspiration and expiration) pause the machine and remove the mask.
- _____ 5. Instruct the person to spit out any secretions or orally suction if needed.
- _____ 6. Allow the person to recover.
- _____ 7. Repeat steps 2-6 for the prescribed number of cycles.
- _____ 8. Turn off machine at the switch and at the power socket.
- _____ 9. If gloves are soiled, remove them; wash hands; and put on clean gloves.
- _____ 10. Clean machine, mask, and tubing according to specific instructions for that individual's equipment.

✓ Remember, it will be difficult for the person to take a normal breath while the insufflator is cycling air in and out. If the person is distressed by this, remove the mask promptly and start again when the person is calm and ready


Trainee name: _____ Date: _____

_____ Instructor initials Instructor Name _____

Comments:



**Authority of DD Personnel to Perform Services by Type - Medication Administration
Reference Grid (ORC 5123.41-.47 and OAC 5123:2-6-3)**

 Applicable Setting	County Board (CB) responsibility for Quality Assessment (QA) by RN. See outlined boxes				
	Certification 1	Certification 1	Certification 2	Certification 3	Delegable Nursing Tasks
	13-HRAs (Health-Related Activities) (HRAs may be delegable without certification per OAC 4723-13)	Medication Administration (Prescribed Oral, Topical, O2 and Inhalers)	G / J Tube Prescribed Medication Administration	Insulin by Sub-Q Injection & Pump and injectable treatments for metabolic glyceemic disorders	Including 13 HRAs & Administration of Nutrition by G/J Tube
Adult Services Settings up to 16 people	Without nursing delegation	Without nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation
Family Support Services	Without nursing delegation	Without nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation
Certified Supported Living Services (1-4 individuals per living arrangements)	Without nursing delegation	Without nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation
Certified Home and Community Based Services (1-4 individuals per living arrangements)	Without nursing delegation	Without nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation
Residential Facilities : 1-5 Beds	Without nursing delegation	Without nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation
Early Intervention, Pre-School, School Age	With nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation
Adult Services Settings with 17 or more people	With nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation
Residential Facilities : 6 or more Beds	With nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation
Other Services by DD Boards or by Ohio Dept of DD	With nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation	With nursing delegation

**As per OBN's Administrative Code Chapter 4723-13, an RN may delegate specific NURSING TASKS to uncertified personnel (following all provisions in OAC 4723-13) . Delegation of MEDICATION requires DODD Certification(s).*

Documentation of Certified DD Personnel Performance of Skills Covered by Certification 1 Training: Initial Certification / Renewal

Certified DD Staff Name: _____ Date _____

*Below is a list of skills included in the Prescribed Medication and Health-Related Activities Training Manual. **The skills below are ALL required for Certification Category 1 Initial training course. Skills verification for renewal must include the General Steps Regardless of Route, and any specific skill currently being used by the personnel.***

Indicate for each skill:

RDC = Returned demonstration in the classroom setting

RDW = Returned demonstration at the work site

VOK = Verbalization of knowledge of how to perform the skills in the classroom setting

- | | | |
|---|--|---|
| <input type="checkbox"/> General: all routes | <input type="checkbox"/> Diastat | <input type="checkbox"/> Glucagon |
| <input type="checkbox"/> Oral Medications | <input type="checkbox"/> MDI inhalers with spacer | <input type="checkbox"/> DPI inhalers |
| <input type="checkbox"/> Eye Medications | <input type="checkbox"/> Compression Hose | <input type="checkbox"/> Nebulizer Treatment |
| <input type="checkbox"/> Topical Medications | <input type="checkbox"/> Ear Medications | <input type="checkbox"/> Nose Medications |
| <input type="checkbox"/> Temperature | <input type="checkbox"/> Rectal Medications | <input type="checkbox"/> Vaginal Medications |
| <input type="checkbox"/> Blood Pressure | <input type="checkbox"/> Pulse | <input type="checkbox"/> Respirations |
| <input type="checkbox"/> Oral Suctioning | <input type="checkbox"/> Clean Dressing | <input type="checkbox"/> Intake/Output |
| <input type="checkbox"/> Glucometer | <input type="checkbox"/> Clean Catch Urine Sample | <input type="checkbox"/> Percussion Vest |
| <input type="checkbox"/> BiPAP/CPAP | <input type="checkbox"/> Oxygen Therapy | <input type="checkbox"/> Pulse Oximetry |
| <input type="checkbox"/> External Urinary Catheter Care | <input type="checkbox"/> Cough-Assist Insufflator-Exsufflator | <input type="checkbox"/> Empty Urine Collection Bag |
| <input type="checkbox"/> MDI inhalers without spacer | <input type="checkbox"/> OTC Topical Musculoskeletal Medications | <input type="checkbox"/> Emptying and Replacing Colostomy Bag |

Skills verification must indicate if done by RDC, RDW or VOK. For any skill/task listed as RDC or VOK the employer may still want to have the certified DD personnel perform a real-life return demonstration prior to assigning that skill/task to the certified personnel. *The RN Trainer may choose to delay certification completion start date until RDW can be completed (see MAIS Decision page for start date edits).*

A copy of Medication Administration Curriculum and Skills Check List can be found at

<http://dodd.ohio.gov/Pages/default.aspx> Home → Health & Welfare → Medication Administration

*Receipt of Category 1 certification indicates that DD personnel have successfully completed training for medication administration and performance of specific health-related activities according to ORC 5123.41-47 and OAC 5123:2-6-01 thru 07. **Nurses, employers and DD personnel are reminded that receipt of certification is not necessarily a guarantee of skill competency. Trained and certified DD personnel may require additional observation, evaluation of skill and review of procedures as needed. Successful re-demonstration of skill is ultimately at the determination of the nurse trainer during training, and delegating nurse and/or employer, where applicable, post training.***

Signature/title of person verifying skills: _____ Date: _____

Annually, the employer or delegating nurse is responsible for having DD personnel complete return demonstrations of any tasks (MA and HRAs) performed as a part of personnel's assigned duties.

Nasal Versed®

Definition of Terms

Epilepsy – A neurological disorder of the brain characterized by loss of consciousness and jerking movements of arms and/or legs; caused by abnormal electrical activity in the brain.

Nasal – Relating to the nose.

Seizure – Abnormal electrical activity in the brain. Seizures can be mild as in episodes of staring off into space or severe as demonstrated by loss of consciousness and uncontrolled movements of the limbs.

- ◀ **Grand mal seizure** – Characterized by loss of consciousness and severe muscle contractions in the arms and/or legs and sometimes arching of the back.



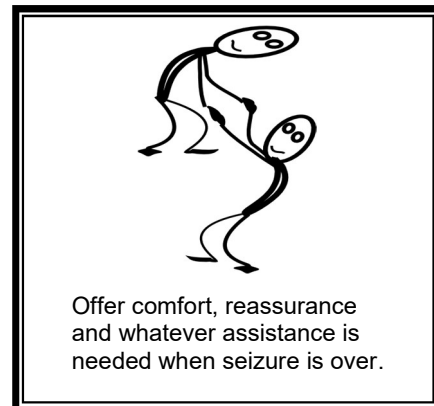
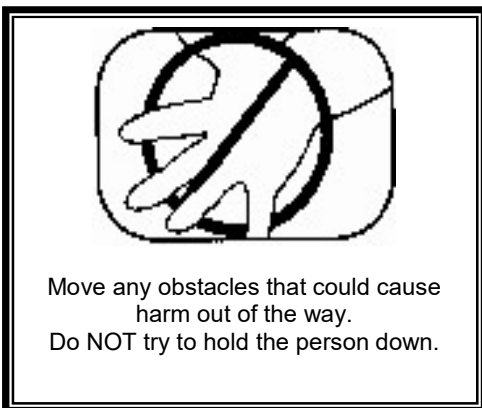
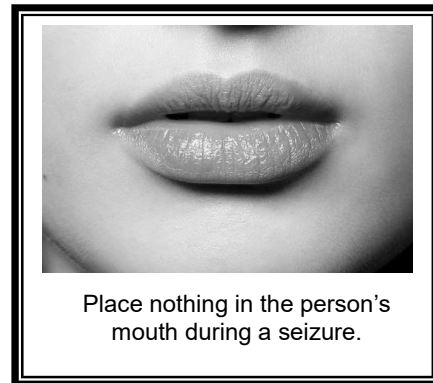
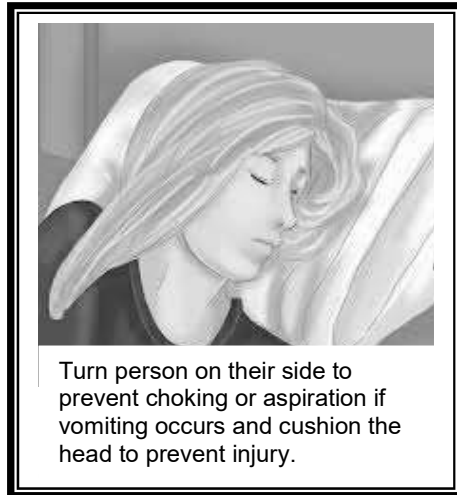
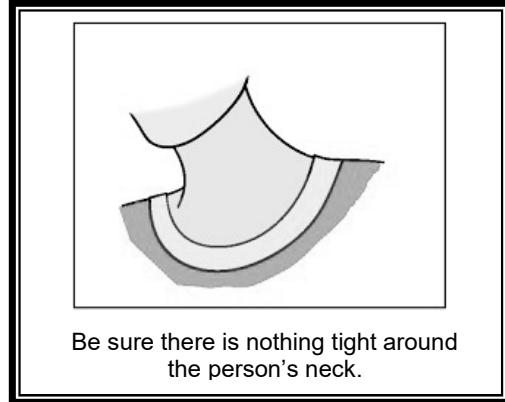
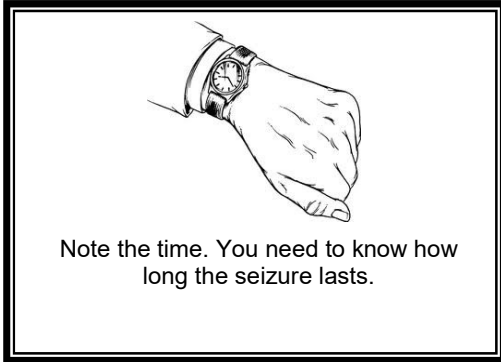
- ◀ **Petit mal Seizure** – A lapse in conscious awareness characterized by staring off into space.



Versed® (Midazolam) – A strong sedative that can be administered **in the nose** to stop seizure activity.



First Aid for Seizures: What to do



Call 911 if:

- The person stops breathing.
- This is the first seizure the person has ever had.
- The person sustains an injury during the seizure.
- The person remains unconscious after the seizure ends.
- The person has a seizure after being seizure free for 12 months or more.
- The seizure is different than the person's "typical" seizure (appearance/duration/frequency).

You must know each person's seizure first aid plan and protocol.

What is Nasal Versed® (Midazolam)?

Versed® is a strong sedative often used to induce sleepiness and relaxation in patients about to undergo surgery. It has also been found to be effective in stopping seizures when given in the nose. Some persons with uncontrolled seizure activity have found relief by using this drug as a part of their seizure first aid plan.

What does Nasal Versed® (Midazolam) do?

It calms the parts of the brain being over stimulated by uncontrolled electrical activity. Once these areas have been calmed, the seizure will stop, but the person will be sleepy.

When is Nasal Versed® (Midazolam) administered?

- ◄ Nasal Versed® (midazolam) is ordered by a health care professional. Staff with DODD Category 1 medication administration certification can administer the Versed® to persons with seizures but only as specifically instructed by the person's health care professional.
- ◄ Staff will be given written instructions about how and when to administer nasal Versed® (midazolam).
- ◄ **Staff need to make sure they understand the instructions clearly and understand how to administer this medication before it is needed. If you do not clearly understand, ask the health care professional.**

What do I need to do?

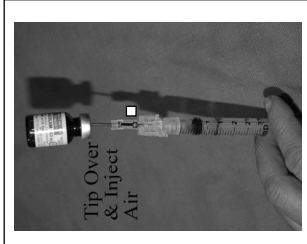
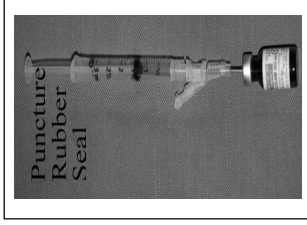
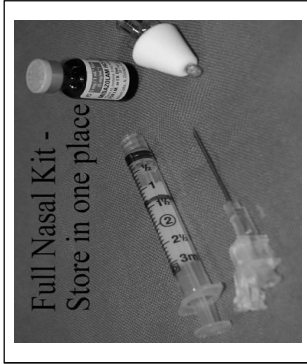
- ◄ You are responsible for following the standard seizure safety protocol as presented during your certification training. Keep the person safe and administer the nasal Versed® (midazolam) as instructed. Follow the steps for administration as presented on page 5 of this training.
- ◄ Because nasal Versed® (midazolam) is an emergency medication, you will need to take it with you wherever you go with the person.
- ◄ You will need to locate the nasal Versed® (midazolam) at the beginning of every shift, check the expiration date and do your 3 MAR checks as presented during your certification training. This way, you will know exactly where the medication is, so that you are ready to use it if needed. **DO NOT draw up the dose BEFORE you need it.**
- ◄ Refill the prescription as often as needed to ensure there is always an adequate supply available.
- ◄ If you used the nasal Versed® (midazolam), you must document its use immediately afterward and inform the appropriate person(s) per your agency's policy.
- ◄ **Call 911 if the seizure does not stop within the time specified by a health care professional, or the seizure activity is different from what is usual for that person.**

General Protocol for Administering Nasal Versed® (Midazolam)

(Individuals will also have protocols specific to the person indicating when to give the medication and who to notify)

1. **If you are not properly trained or skilled in administering nasal Versed® (midazolam) DO NOT attempt to administer. Call 911.**
2. Follow the steps presented in “First Aid for Seizures” when seizure activity begins.
3. Note the time the seizure begins (so you can administer the Versed® at the correct time).
4. If seizure persists beyond the time specified, administer nasal Versed® (midazolam) per manufacturer’s instructions and the person’s drug orders.
5. Note the time Versed® (midazolam) was administered (so you can administer repeat doses if needed, and document when it is safe to do so).
6. If repeat doses are prescribed for cluster seizures, follow the prescribed instructions.
7. Document the person’s response to the Versed® (midazolam).
8. Note and then record the time seizure stops.
9. Monitor the person during recovery from the seizure. **If you cannot arouse the person after the seizure activity stops, call 911 immediately.**
10. If you call 911, inform the appropriate person(s) right away per your agency policy.
11. Complete documentation specified here and as required by your agency policy.
12. If the person is not being provided with pre-filled syringes, please ask the pharmacy if the pre-filled syringes can be made available. If the pre-filled syringe is available, follow the steps for administration as presented on page 6 of this training.

SAMPLE Steps for Administration of Nasal Versed® (Midazolam) SAMPLE

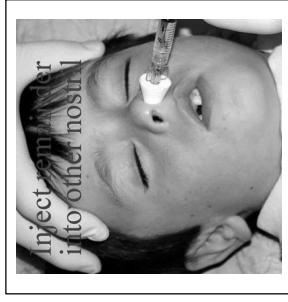
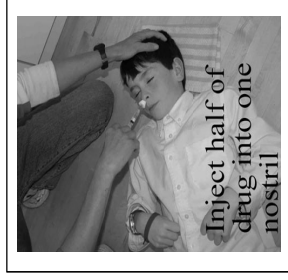
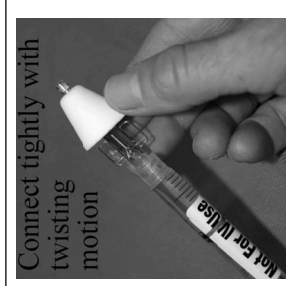
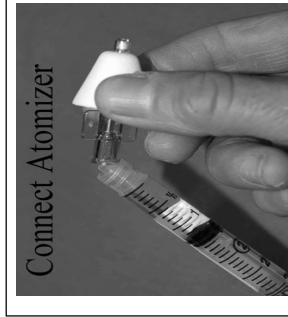
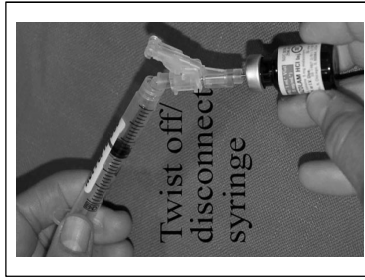
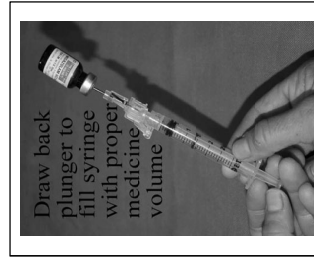


Be sure you know how to do the procedure.

Pull the plunger to fill with the same as the amount of Versed® you will need to pull from the vial.

Pop plastic protective cap off the vial. Do not touch the rubber top.

Place needle into the rubber stopper. Turn vial upside down. Inject the air.



Pull back on plunger to fill syringe with ordered amount of Versed®.

Twist syringe off the needle device. Put needle in sharps container.

Attach atomizer tip to end of syringe using a twisting motion.

Hold crown of head stable. Place tip of atomizer snugly against nostril aiming slightly up and outward (toward top of ear). Briskly compress the plunger to deliver ½ of the medication into the nostril. Next, move the atomizer to the other nostril and administer the remaining medication into the other nostril.

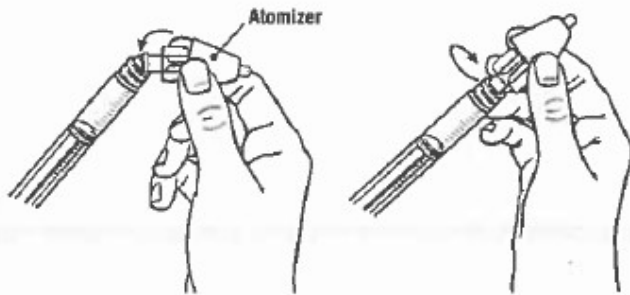
SAMPLE

Steps for Administration of Nasal Versed® (Midazolam) from a Pre-filled Syringe

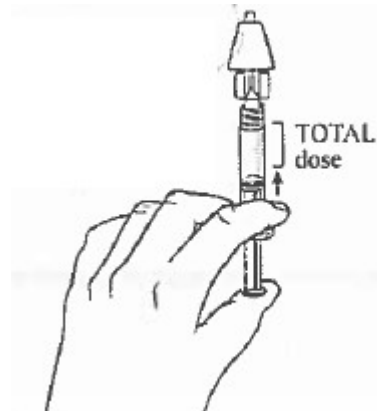
1. Remove tip cap from the midazolam syringe by twisting off. Discard the cap.



2. Attach the atomizer to the syringe. (Connect tightly with twisting motion.)



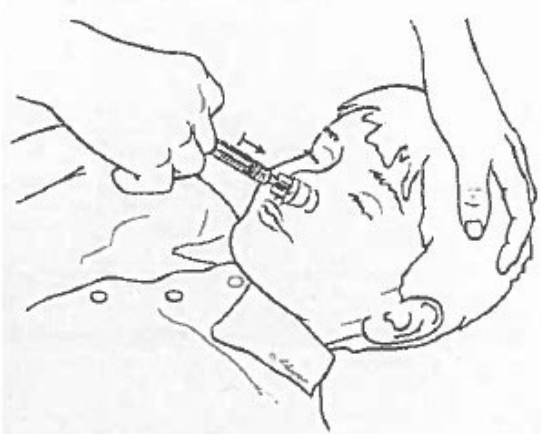
3. If needed, press in the plunger to discard some medicine to get to the prescribed TOTAL dose.



4. Hold person's head steady with free hand. Insert the head of the atomizer into one nostril snugly. Quickly press in the plunger to deliver HALF the dose into that nostril.



5. Insert the head of the atomizer into the other nostril. Press the plunger fully to deliver the other half of the dose.



Certification 1 Skills Checklist: Administration of Nasal Versed® (Midazolam)

- _____ 1. Wash hands.
- _____ 2. Assemble supplies.
- _____ 3. Prepare Versed® (midazolam) per manufacturer's instructions.
- _____ 4. Put on gloves.
- _____ 5. Position person on their back or side to receive Versed® (midazolam) – as per their protocol.
- _____ 6. Instill Versed® (midazolam) in each nostril as prescribed and per manufacturer's instructions.
- _____ 7. Place person on their side in recovery position.
- _____ 8. Remove gloves and wash hands when it is safe to do so.
- _____ 9. Document administration of Versed® (midazolam).
- _____ 10. Notify the appropriate person(s) per agency policy.
- _____ 11. Monitor the person. Arouse person periodically. Record times.
- _____ 12. Store equipment per manufacturer's instructions.
- _____ 13. Confirm adequate supply remaining or call for refill.

****Call 911 if:**

- ◀ Person is turning blue or is having problems breathing.
- ◀ The person remains unconscious after the seizure ends.
- ◀ Seizure is different from previous seizures.
- ◀ Person sustained a head injury or other life-threatening injury during seizure.
- ◀ Seizure does not stop within the time frame specified by the health care professional.

Trainee name: _____ **Date:** _____

_____ **Instructor Initials** **Instructor Name** _____

Comments: