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

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples of Medications</th>
<th>Examples of Side Effects</th>
<th>Related Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bronchodilators</strong></td>
<td>Rescue Proventil Ventolin Duoneb®</td>
<td>↓ Tremors ↓ Agitation ↓ Dizziness ↓ Hyperactivity ↓ Increased pulse ↓ Bad taste in mouth ↓ Nausea, vomiting</td>
<td>↓ Observe breathing and secretions ↓ Do not share a nebulizer or an inhaler ↓ Rinse mouth and spit after use ↓ Clean inhaler after use</td>
</tr>
<tr>
<td></td>
<td>Maintenance Atrovent Spiriva ® Serevent ® Foradil ® Brovana ®</td>
<td>Atrovent and Spiriva side effects ↓ Dry mouth ↓ Constipation ↓ Difficulty passing urine</td>
<td></td>
</tr>
<tr>
<td><strong>Steroids</strong>*</td>
<td>Maintenance Advair ® Symbicort ® Dulera ® Breo ® QVAR ® AeroSpan ® Flovent ® Pulmicort Respules ® Pulmicort Flexhaler ® Asmanex ® Alvesco ®</td>
<td>↓ Thrush in the mouth ↓ Hoarse voice ↓ Cough</td>
<td>↓ 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</td>
</tr>
</tbody>
</table>

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

Revised 07/21/17  Categories of Inhaled Medications
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.

**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.
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.
______ 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.
______ 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
   • 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.


_____ 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, \textbf{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:
\begin{itemize}
  \item Name of medication
  \item Number of inhalations given
  \item Your initials
  \item Note any complaints / any action taken
\end{itemize}

\begin{center}
\textbf{Trainee name:} __________________________ \textbf{Date:} _____________
\textbf{Instructor initials} \hspace{1cm} \textbf{Instructor Name:} ________________________________
\end{center}

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\textbf{Comments:}
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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.
______ 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
   \- Your initials
   \- Pulse and respirations at end of treatment
   \- Note any complaints / any action taken

Trainee name: ___________________________ Date: ________________
______ Instructor initials       Instructor Name____________________________

Comments: