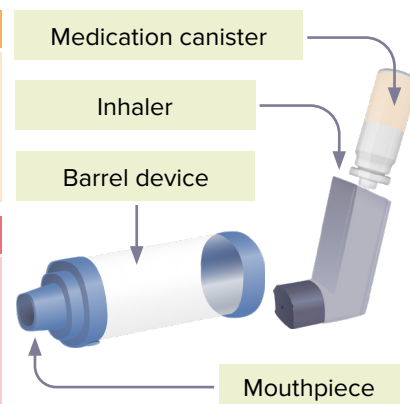


MEDICATIONS ADMINISTERED BY METERED-DOSE INHALER (MDI)



Metered-Dose Inhalers

What is a metered-dose inhaler? <ul style="list-style-type: none"> • Most common type of inhaler • Uses a press-and-breathe method • Delivers a specific dose of medications in aerosol form 	Commonly used drugs in metered-dose inhalers: <ul style="list-style-type: none"> • Short-acting beta-2 agonists (SABAs) • Inhaled corticosteroids (ICS) • Combination drugs: long-acting bronchodilators (LABAs) and ICS
Advantages of MDIs <ul style="list-style-type: none"> • Convenient and easy to carry • Non breath activated • More cost effective than dry powder inhalers • Requires no preparation 	Disadvantages of MDIs <ul style="list-style-type: none"> • Patient coordination required • High pharyngeal deposition • Challenging to ascertain the remaining doses



Types of inhalers		
Metered-dose inhalers	Dry powder inhalers	Soft mist inhalers
<ul style="list-style-type: none"> • Hold medication in a pressurized canister • Propellant sends medication out of the mouthpiece. 	<ul style="list-style-type: none"> • Store medicine as a powder inside capsules • Capsules are activated when the inhaler is ready to be used. 	<ul style="list-style-type: none"> • Turn liquid medicine into a low-velocity aerosol mist • Can be slowly inhaled through the mouth • No propellant used

Rescue inhalers	Maintenance inhalers
<ul style="list-style-type: none"> • Short-acting bronchodilators • For acute symptoms • Quickly open the airways 	<ul style="list-style-type: none"> • Long-term control • Reduce swelling and tightening of airways • Block immune system chemicals

Patient Education

1 How to use a metered dose inhaler in 10 easy steps

1. Take off cap, shake inhaler, prime.
2. Stand up or sit up straight.
3. Breathe out completely and empty your lungs.
4. Place mouthpiece on your mouth.
5. Close lips to form a tight seal or use 2-finger space as directed.
6. Start to breathe in, press down top of canister to release one "puff" of medicine.
7. Continue to breathe in for 3–5 seconds.
8. Hold your breath and count to 10.
9. Take mouthpiece off your mouth and release your breath, rinse your mouth with water.
10. Put cap back on the inhaler.

2 How to use a metered-dose inhaler with a spacer

1. Take off cap, shake inhaler, prime.
2. Stand up or sit up straight, take cap off.
3. Connect inhaler into chamber/spacer.
4. Breathe out away from the device.
5. Put the chamber mouthpiece into your mouth.
6. Press inhaler once and breathe deep and steadily.
7. Hold breath for 10 seconds, then breathe out slowly.
8. Rinse your mouth with water.
9. Put the cap back on the inhaler.



Study tips	Side effects
Mnemonic: S Shake well P Prime inhaler O Breathe out R Rest inhaler on mouth or use 2-finger spacing T Take deep breath and press T Ten seconds, hold breath	<ol style="list-style-type: none"> 1. Thrush (with corticosteroids) 2. Mouth sores 3. Hoarse voice 4. Headache 5. Shakiness 6. Tachycardia

NOTES

