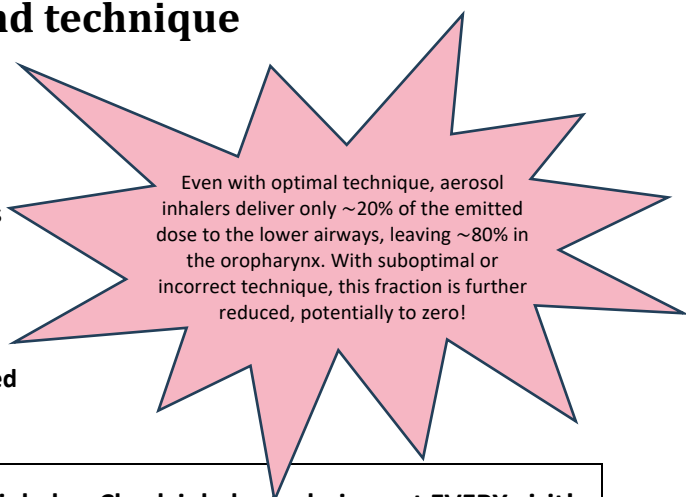





Inhalers – types and technique

- Inhalers are used by many people for control of asthma, COPD and other chronic lung diseases.
- Inhaler technique is usually suboptimal.
- Adherence and inhaler technique should be checked carefully before any step-up in medication, but most health care professionals are not confident about how to do this.
- There are many types of inhaler devices, but most commonly either aerosol (pressurised metred-dose inhaler) or dry powder inhalers (turbohalers).
- If a patient requires more than one inhaler, **they should be prescribed the same type of device whenever possible.**



Type of inhaler	Notes	How to use this inhaler: Check inhaler technique at EVERY visit!
Pressurised metred-dose inhaler – pMDI (aerosol) 	This inhaler works MUCH better if used with a spacer. In children <10y it can ONLY be used with a spacer (as they cannot coordinate their breathing enough to use correctly without a spacer)	<ul style="list-style-type: none"> • Shake the inhaler before every puff • Breathe out • Put the inhaler into the mouth, closing lips/teeth around it • As you take a deep slow breath in, give ONE PUFF ONLY of the inhaler as you do this, and keep breathing in until the lungs are full • Hold your breath and count to 5 • To take a second dose, shake the inhaler again and repeat these steps • If the inhaler contained steroids, rinse mouth with water and spit out to reduce chance of side effects https://www.asthmaandlung.org.uk/living-with/inhaler-videos/pmdi
pMDI + spacer 	A plastic bottle can be adapted to make a spacer. Wash spacers (or replace the bottle) about once a month. To wash, gently clean in warm soapy water. Do not scrub. Leave to air dry to reduce static.	<ul style="list-style-type: none"> • Shake inhaler before every single puff, then put into spacer/bottle • Put spacer into mouth, closing lips/teeth around it (For young children, the spacer can be used with a mask, or the bottle can be cut to go over the child's nose and mouth) • Give SINGLE puff of inhaler (no need to coordinate with breathing) • Take 4 slow, deep breaths to full inspiration • To take a second dose, shake the inhaler again and repeat these steps. • If the inhaler contained steroids, rinse mouth with water and spit out to reduce chance of side effects https://www.asthmaandlung.org.uk/living-with/inhaler-videos/spacer-tidal
Turbohalers (dry powder, breath activated) 	These <u>need a good inspiratory breath to work</u> . Therefore, they are very difficult to use if frail or if severe COPD/asthma.	<ul style="list-style-type: none"> • Twist off the protective cover • Turn the bottom part of the inhaler fully in one direction until it can go no further, then fully back again as far as it will go in the other direction. You should hear a click. • Put the mouthpiece between your teeth, and close your lips around it • Take a deep breath in • To take a second dose, repeat the above • If the inhaler contained steroids, rinse mouth with water and spit out to reduce chance of side effects https://www.asthmaandlung.org.uk/living-with/inhaler-videos/turbohaler

References

Vincken W, Levy ML, Scullion J, et al. Spacer devices for inhaled therapy: why use them, and how? ERJ Open Res 2018; 4: 00065-2018 [https://doi.org/10.1183/23120541.00065-2018]; www.asthmaandlung.org.uk