

Asthma and COPD Diagnosis, Inhalers and Exacerbations

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Asthma diagnosis and outpatient control

- Variable symptoms plus objective variable airflow limitation. Normal spirometry between attacks does not exclude asthma.
- GINA 2026 emphasizes ICS-containing treatment for adults/adolescents; avoid SABA-only care.
- An appropriate ICS-formoterol product may be used as anti-inflammatory reliever and/or MART under local protocols.
- Check device technique, adherence, exposure, cost, comorbidity and risk of repeated oral steroids before step-up.
- Provide personalized written action plans and follow-up after an exacerbation.

Acute asthma: severity

- Emergency signs: speech limitation, exhaustion, reduced consciousness, silent chest and severe hypoxemia.
- Normalizing/rising PaCO₂ with severe distress suggests fatigue; obtain emergency airway support.
- Emergency bronchodilator, steroids and selected adjuncts under local protocol; do not replace IM epinephrine in anaphylaxis.

COPD diagnosis and maintenance

- Confirm persistent post-bronchodilator obstruction (GOLD FEV₁/FVC <0.70; interpret age and clinical context).
- Treatment guided by symptoms and exacerbation risk; LABA/LAMA often central; ICS selected based on exacerbations, eosinophils, asthma and pneumonia risk.
- Smoking cessation, vaccinations, pulmonary rehab, inhaler review and selective long-term oxygen eligibility.

COPD exacerbation and CO₂ retention

- Differentiate pneumonia, HF, PE, ACS and pneumothorax from acute COPD exacerbation.
- Controlled oxygen often initially targets 88-92% in CO₂-retention risk pending gas/local guidance; never withhold needed oxygen for dangerous hypoxemia.
- Acidemia with elevated PaCO₂ may benefit from monitored NIV in appropriate patients; altered consciousness and shock warrant airway evaluation.
- Antibiotics are selective for bacterial features; systemic steroids and bronchodilators require safety monitoring.

[GINA 2026: Asthma strategy and summary guide](#)

[GOLD 2026: COPD report and pocket guide](#)

[Choosing Wisely Canada: Respiratory medicine](#)

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