Assessing and reviewing asthma in adults and adolescents

Read first

- Overview of asthma management in adults & adolescents
- Confirming a previous diagnosis of asthma in adults & adolescents
- Definition of exacerbations

Recommendation

Monitor asthma symptom control frequently.

Assess symptom control at asthma-specific visits, and opportunistically at other visits by asking about the previous 4 weeks:

- how many days per week the person experienced daytime symptoms
- how many days per week the person used their reliever for asthma symptoms
- whether the person experienced any limitation of their normal activities due to asthma
- whether the person experienced any symptoms during night or when waking up.

Also ask about asthma since the last visit:

- time off work or school due to asthma
- whether the person needed to follow their asthma action plan
- any exacerbations severe enough to require an ED visit or other urgent care.

Sources & rationale

Recommendation type: Consensus recommendation

In addition effects on quality of life, symptom frequency and SABA use are independent predictors of the risk of severe exacerbations.[GINA 2025]

In patients using budesonide-formoterol as needed only without maintenance treatment (recommended level 1 treatment), frequency of reliever use has not been shown to be an independent predictor of risk. However, ongoing need for reliever ≥3 times per week suggests that maintenance treatment with low-dose ICS-formoterol should be added (i.e. switch to MART).

References

Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention, 2025. Available from: www.ginasthma.org

Notes

Good asthma symptom control means few daytime asthma symptoms (≤2 days per week), no limitation of activities due to asthma, no nighttime symptoms or symptoms when waking up, and infrequent reliever use (≤2 days per week, not including doses taken prophylactically before exercise).

Current asthma control is poor if any of these occurred during the past 4 weeks: daytime symptoms >2 days per week, any limitation of activities, any symptoms during night or on waking, reliever use >2 days per week (not including doses taken

prophylactically before exercise).

Recommendation

Take a smoking and vaping history for all patients.

Ask patients about exposure to environmental tobacco smoke as well as smoking.

Consider the possibility of coexisting COPD and asthma in people who smoke or previously smoked.

Sources & rationale

Recommendation type: Consensus recommendation

Smoking is an independent risk factor for asthma exacerbations and development of persistent airflow limitation.[GINA 2025] Exposure to environmental tobacco smoke is also associated with poor control of asthma.[GINA 2025]

Smoking is the most important risk factor for COPD.[Yang 2024]

References

Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention, 2025. Available from: www.ginasthma.org

Yang IA, George J, McDonald CF, et al. The COPD-X Plan: Australian and New Zealand Guidelines for the management of chronic obstructive pulmonary disease 2024. Version 2.77, December 2024. Published online 9 April 2025 https://copdx.org.au/copd-x-plan/

Resources

RACGP's Supporting smoking cessation: a guide for health professionals (2024)

Lung Foundation Australia's The COPD-X Plan: Australian and New Zealand guidelines for the management of chronic obstructive pulmonary disease 2024.

Recommendation

Assess the patient's risk factors for exacerbations, loss of lung function, or treatment side effects.

See Key figures & tables - *Table. Checklist for risk factors in adults and adolescents.*

Table

Checklist for risk factors in adults and adolescents

Factors associated with increased risk of exacerbations
Poor asthma symptom control
Any asthma exacerbation during the previous 12 months
High SABA use (3 or more salbutamol canisters in a year, i.e. average of 1.6 actuations per day/11 actuations per week)
Other concurrent chronic lung disease
Poor lung function (even if few symptoms)
Difficulty perceiving airflow limitation or the severity of exacerbations
Eosinophilic airway inflammation (blood eosinophil count ≥300/microlitres despite maintenance treatment with medium-dose ICS)
Exposure to cigarette smoke/vapes, smoke from fires
Socioeconomic disadvantage
Mental illness
Factors associated with increased risk of life-threatening asthma
History of severe exacerbation (intubation/ICU admission due to asthma [ever], 2 or more hospitalisations for asthma in past year, 3 or more ED visits for asthma in the past year, or hospitalisation or ED visit for asthma in the past month)
History of sudden-onset acute asthma
History of delayed presentation to acute care during moderate–severe exacerbation
High SABA use (particularly if 12 or more salbutamol canisters/year, i.e. average 6.6 actuations per day)
Comorbid cardiovascular disease
Sensitivity and exposure to an unavoidable allergen (e.g. mould)
Lack of written asthma action plan
Social isolation
Socioeconomic disadvantage
Mental illness
Factors associated with thunderstorm asthma
Springtime allergic rhinitis or confirmed ryegrass pollen allergy (if exposed to high grass pollen levels during spring and early summer)
Factors associated with accelerated decline in lung function
Chronic hypersecretion of mucus
Severe asthma exacerbation when not taking ICS
Poor lung function
Eosinophilic airway inflammation (blood eosinophil count ≥300/microlitres despite maintenance treatment with medium-dose ICS)
Exposure to cigarette smoke
Occupational asthma

Factors associated with adverse effects of treatment
Long-term high-dose ICS
Frequent use of OCS

Additional information

ED: emergency department; ICS: inhaled corticosteroids; SABA: short-acting beta$_2$ agonist; OCS: oral corticosteroid

Reassess at an annual asthma review if possible, at asthma-specific visits, and opportunistically at other times.

Sources & rationale

Recommendation type: adapted from GINA

Poor control of asthma symptoms is strongly associated with increased risk of severe exacerbation.[GINA 2025]

Patients with a history of severe exacerbations (one or more in the past year, or any asthma exacerbation that required ICU treatment or intubation) have a high risk of further exacerbations.[GINA 2025]

Other independent risk factors for exacerbations include over-use of SABA reliever, inadequate ICS treatment (no ICS, poor adherence to prescribed ICS or incorrect inhaler technique), obesity, chronic rhinosinusitis, GERD, confirmed food allergy, pregnancy, smoking, vaping, allergen exposure (if sensitised), air pollution, major psychological or socioeconomic problems, poor lung function (low FEV_1), marked bronchodilator response, and elevated biomarkers of type-2 inflammation (blood eosinophil count, FeNO).[GINA 2025]

Risk factors for developing persistent airflow limitation include preterm birth/low birth weight, chronic mucus hypersecretion, severe exacerbations without ICS treatment, exposure to smoke, airborne irritants or sensitisers, and poor lung function (low FEV_1).[GINA 2025]

Also assess risk of systemic adverse events due to frequent courses of systemic corticosteroids, high doses of ICS, or drug-drug interactions with P450 inhibitors.[GINA 2025]

High-dose ICS and incorrect inhaler technique with ICS inhalers are associated with increased risk of local adverse effects such as oral candidiasis and dysphonia.[GINA 2025]

References

Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention, 2025. Available from: www.ginasthma.org

Recommendation

After the diagnosis of asthma has been established, perform or arrange spirometry periodically to monitor lung function.

Obtain spirometry:

- when making or confirming the diagnosis
- to investigate poor asthma symptom control or exacerbations
- approximately every 2 years, even if the patient reports good symptom control, to assess risk of exacerbations and decline in lung function.

Sources & rationale

Recommendation type: Consensus recommendation

Periodic spirometry is necessary to detect poor lung function, which could deteriorate over time and result in airway remodelling.

Some patients do not experience symptoms when they have poor lung function, so declining lung function may be undetected without spirometry.

More information: Lung function tests

Notes

Monitor pre-bronchodilator FEV_1.

Withholding of bronchodilators is not necessary before spirometry conducted for monitoring purposes. Withholding is necessary for diagnostic spirometry.

Recommendation

Do not use peak expiratory flow monitoring in the clinic to assess lung function.

Sources & rationale

Recommendation type: Consensus recommendation

Spirometry provides more reliable information about lung function than peak expiratory flow measurement.[GINA 2025]

References

Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention, 2025. Available from: www.ginasthma.org

Notes

Serial PEF may be required during diagnostic investigation in a patient with suspected work-related asthma.

Adults can perform daily PEF monitoring if they wish. PEF thresholds for action can be incorporated into asthma action plans for adults.

More information: Lung function tests

Consideration

Validated questionnaires can be used to assess asthma symptom control.

Sources & rationale

Recommendation type: Consensus recommendation

Questionnaires validated for use in adults include:

- Asthma Control Test (Asthma Score) [Nathan 2004, Schatz 2006, Schatz 2009, Thomas 2009]
- Asthma Control Questionnaire [Juniper 1999, Juniper 2005, Juniper 2009]

Questionnaires validated for use in adolescents 12–18 years include:

- Asthma Control Questionnaire.[Juniper 2010, Nguyen 2014]

References

Juniper EF, O'Byrne PM, Guyatt GH, et al. Development and validation of a questionnaire to measure asthma control. Eur Respir J 1999; 14: 902-907.

Juniper EF, Svensson K, Mork AC, et al. Measurement properties and interpretation of three shortened versions of the asthma control questionnaire. Respir Med 2005; 99: 553-558.

Juniper EF, Bousquet J, Abetz L, et al. Identifying 'well-controlled' and 'not well-controlled' asthma using the Asthma Control Questionnaire. Respir Med 2006; 100: 616-621.

Juniper EF, Gruffydd-Jones K, Ward S, et al. Asthma Control Questionnaire in children: validation, measurement properties, interpretation. Eur Respir J 2010; 36: 1410-1416.

Nathan RA, Sorkness CA, Kosinski M, et al. Development of the asthma control test: a survey for assessing asthma control. J Allergy Clin Immunol 2004; 113: 59-65.

Nguyen JM, Holbrook JT, Wei CY, et al. Validation and psychometric properties of the Asthma Control Questionnaire among children. J Allergy Clin Immunol 2014; 133: 91-97.e91-96.

Schatz M, Sorkness CA, Li JT et al. Asthma Control Test: reliability, validity, and responsiveness in patients not previously followed by asthma specialists. J Allergy Clin Immunol 2006; 117: 549-556.

Schatz M, Kosinski M, Yarlas AS et al. The minimally important difference of the Asthma Control Test. J Allergy Clin Immunol 2009; 124: 719-723.

Thomas M, Kay S, Pike J, et al. The Asthma Control Test (ACT) as a predictor of GINA guideline-defined asthma control: analysis of a multinational cross-sectional survey. Prim Care Respir J 2009; 18: 41-49.

Resources

Online asthma control questionnaires

Consideration

For pregnant patients who have asthma, include assessment of asthma symptom control and risk factors in antenatal visits.

Sources & rationale

Recommendation type: Consensus recommendation

Approximately 40% of pregnant women with asthma experience worsening asthma symptoms, and at least 20% have an exacerbation that requires medical intervention.[Murphy 2023]

Asthma exacerbations during pregnancy are associated with low birth weight, preterm birth, and small for gestational age status.[Murphy 2023]

References

Murphy VE, Gibson PG, Schatz M. Managing asthma during pregnancy and the postpartum period. J Allergy Clin Immunol Pract 2023; 11: 3585-3594.

Consideration

Monitor growth in adolescents taking high doses of inhaled corticosteroids or frequent courses of oral corticosteroids.

Alert Systemic corticosteroids should be avoided except when necessary to manage clinically significant exacerbations.

Sources & rationale

Recommendation type: Consensus recommendation

Notes

Long-term high-dose ICS treatment is not recommended.

Practice point

Ask patients about their understanding of asthma and correct any misunderstandings. Emphasise that asthma is a long-term condition present even when the person is not experiencing symptoms.

Practice point

Before offering treatment options and advice, ask patients about their goals for asthma management.

Practice point

Aim to schedule a visit at least once per year to review asthma.

During an asthma review:

- ask about problems with symptoms, exacerbations or medication since last visit
- ask about triggers, including exposure to smoking/vaping and relevant allergens (if sensitised)
- reassess recent symptom control
- reassess risk factors for exacerbations and lung function decline
- ask about side effects and reassess risk
- check inhaler technique
- check adherence
- check comorbid conditions that may affect asthma
- update the person's asthma action plan.

Practice point

During visits when there is limited time for a full risk factor assessment, ask about symptoms and exacerbations. The strongest predictors of future exacerbations are poor symptom control, and severe asthma exacerbations treated with systemic corticosteroids within past year.

Practice point

For adolescents, check for school absence due to asthma, risk-taking behaviours including smoking, vaping, exposure to other people's smoke/vapes, and illicit drug use, poor adherence, psychosocial stressors.

Practice point

Adolescents often under-report asthma symptoms and may not report a typical clinical history. Careful history taking may be needed to reveal exercise-avoidance behaviour or habitual avoidance of other triggers.

Practice point

Advise patients that if they are needing to use their reliever more than twice a week, they should visit for asthma reassessment as soon as possible – they should not postpone this checkup until a scheduled asthma review or a visit for another problem.

Practice point

If spirometry findings are markedly discordant with symptoms (e.g. normal spirometry in a patient with frequent symptoms, or FEV1 <70% predicted in a patient with no respiratory symptoms), consider the possibility of an alternative diagnosis, referral to an accredited respiratory laboratory for spirometry and/or bronchial provocation testing, or referral for specialist assessment.

Practice point

Consider arranging a Home Medicines Review or Residential Medication Management Review for patients with multimorbidity/polypharmacy or difficult-to-treat asthma, to check inhaler technique and adherence.

Practice point

When dispensing asthma medicines in pharmacies, routinely ask when the person last had an asthma review. Encourage them to visit their GP for a comprehensive asthma review as soon as possible if any of the following apply:

- sporadic or irregular dispensing of ICS inhalers
- frequent dispensing of salbutamol or terbutaline
- needing reliever more than twice a week
- frequent purchase of salbutamol
- lack of ICS prescription
- current symptoms.

Resources

Medicare Benefits Schedule - Item 900
https://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=900

Medicare Benefits Schedule - Item 903
https://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=903

Practice point

In pharmacies, ask pregnant women with asthma about symptom control, advise them not to stop their ICS, and advise the prescriber if a pregnant woman requests SABA frequently.