

Priority Topic: ASTHMA

Key Features:

For a single source of info on this topic: (*amazing* but don't cover acute care)

- **ADULTS:** [Asthma in Adults JAMA 2017](#)
- **PEDS:** [Pediatric Asthma in a Nutshell AAP 2014](#)

1. In patients of [all ages with respiratory symptoms](#) (acute, chronic, recurrent):

- Include [asthma in the differential](#) diagnosis.
- [Confirm the diagnosis](#) of asthma by appropriate use of:
 - history.
 - physical examination.
 - [spirometry](#).

What you should study: make a differential of RESP symptoms

- ✓ [Asthma AIM 2014](#)
- ✓ [Asthma in Adults JAMA 2017](#)
- ✓ [Approach to Interpreting PFTs AAFP 2014](#)

2. In a child with [acute respiratory distress](#), distinguish asthma or bronchiolitis from croup and foreign body aspiration by taking an [appropriate history](#) and doing a [physical examination](#).

What you should study:

- ✓ [EM Cases Episode 79: Pediatric Asthma](#)
- ✓ [EM Cases Digest Vol 2: Pediatric Emergencies, Chapter 13: Asthma](#)
- ✓ [Diagnosis and Management of Asthma in Preschoolers CPS Statement](#)
- ✓ [Asthma Handbook of Australia: Diagnosis in Children](#) **parts of this chart are clickable for more information**

3. In a **known asthmatic**, presenting either because of an acute exacerbation or for ongoing care, objectively **determine the severity** of the condition (e.g., with history, including the pattern of medication use, physical examination, spirometry). **Do not underestimate severity.**

What you should study:

- ✓ **Asthma in Adults JAMA 2017 Figure 2**
- ✓ **PRAM Score for Pediatric Asthma (designed by McGill's own Peds ER staff Dr Dominic Chalut in 2000, and now used worldwide!)**

4. In a known asthmatic with an **acute exacerbation**:

- a) **Treat** the acute episode (e.g., use beta-agonists repeatedly and early steroids, and avoid under-treatment).
- b) Rule out **co-morbid disease** (e.g., complications, congestive heart failure, chronic obstructive pulmonary disease).

****Note that co-morbidities are a risk factor for asthma-related death! Look for things like cardiac problems, pneumonia, smoking, etc.**

- c) Determine the **need for hospitalization or discharge** (basing the decision on the risk of recurrence or complications, and on the patient's expectations and resources).

What you should study:

- ✓ **Managing Peds Acute Asthma CPS Statement 2012 (versions anglais/français)**
- ✓ **Acute Asthma Exacerbations in Adults AAFP 2011 Table 2 and Figure 2 includes list of risk factors for asthma-related death**
- ✓ **Leukotriene antagonists in acute asthma AAFP 2016 (1-pager)**

5. For the **ongoing (chronic) treatment** of an asthmatic, propose a stepwise management plan including:

- **self-monitoring**.
- **self-adjustment** of medication.
- when to **consult back**.

What you should study: make sure you know how to treat stable asthma

✓ **Asthma in Adults JAMA 2017 (treating stable asthma)**

✓ **Asthma Medications 2016 (pictures of puffers)**

Multiple options for action plans:

- ✓ **Asthma Action Plan AAFA 2018**
- ✓ **Asthma Action Plan Australia 2015**
- ✓ **Asthma Action Plan Lung Association**

6. For a known asthmatic patient, who has **ongoing or recurrent symptoms**:

- Assess **severity** and **compliance** with medication regimens.
- Recommend **lifestyle adjustments** (e.g., avoiding irritants, triggers) that may result in less recurrence and better control.

What you should study: assessment of severity covered above

✓ **Ask about compliance, consider having your patients document puffer use**

✓ **How to use your puffer at asthma.ca**

✓ **Asthma BC Guidelines 2015 Appendix A: Lifestyle**

EM CASES RAPID REVIEWS: 7-10 min VIDEOS

- **Pediatric Asthma Part 1**
- **Pediatric Asthma Part 2**

Reivew: You should know...

- **diagnosis by Hx, Px, and spirometry in adults**
- **diagnosis by Hx and Px in peds**
- **severity assessment in peds and adults**
- **managing stable asthma in peds and adults (meds and follow up)**
- **managing acute exacerbations in peds and adults**