GUIDE TO DIAGNOSIS & MANAGEMENT OF ASTHMA

- ***Recurrent wheezing is 3 or more episodes in a year***
- ***Main causes of recurrent wheezing in children are***

- *Asthma*
- *Infections such as bronchiolitis*
- *Gastro-oesophageal reflux*
- *Enlarged hilar lymph nodes e.g., TB.*

- The majority of children with ***recurrent wheeze*** have **asthma.**
- **Asthma should be diagnosed in any child with a recurrent cough or wheeze that is responsive to bronchodilators.**

DIAGNOSIS

Consider asthma if:

- History of:
  - recurrent **wheezing**
  - **chronic cough** worse at night
  - colds that **"go to the chest"**
  - **cough** occurring after **exercise**
- Symptoms worse at **night**
- Symptoms occur or worsen in the presence of:
  - colds
  - animals with fur
  - smoke
  - changes in weather
  - pollen
  - exercise
- A family history of asthma or allergies
- Symptoms improve after giving a bronchodilator

CLASSIFY TYPE OF ASTHMA

Classify according to symptoms

- **intermittent** asthma
- **persistent** asthma (symptoms more than once a week or nightime symptoms more than twice a month).
  - children with persistent asthma should be referred for chronic management

TREAT

Treatment includes:

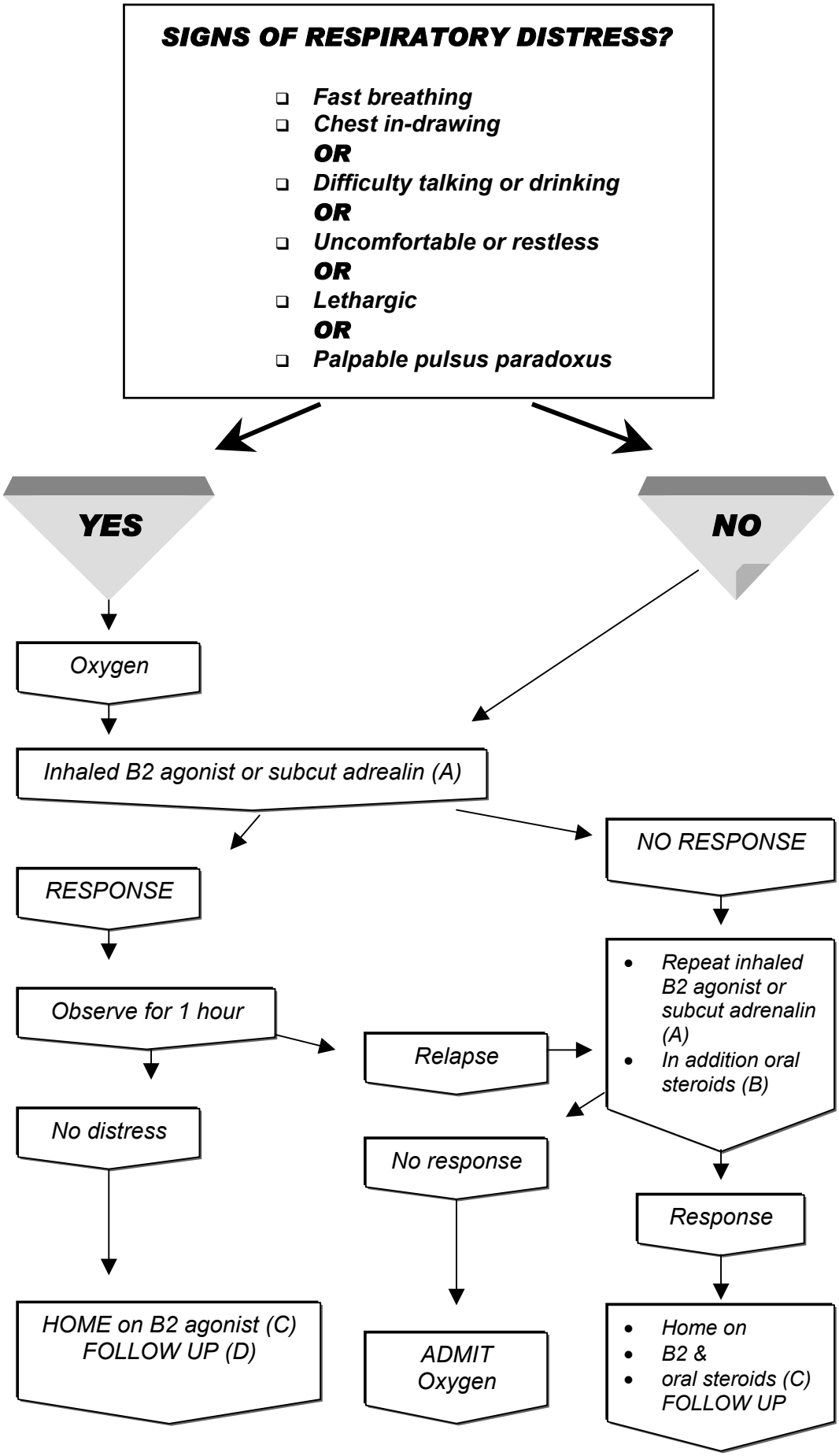
- **Avoid** asthma triggers
- **Prophylaxis** (prevent) attacks
- **Relief** of acute asthma attacks
- **Inhaled** B2 agonist should be used for relief of acute attacks given via:
  - MDI-spacer and face mask in children < 2 years
  - MDI-spacer and mouth piece in children > 2yrs

  Inhaled B2 agonist should be used as:
  - salbutamol 200-500ug (2-5 puffs) at 1 puff every 10 secs via MDI-spacer *or*
  - salbutamol solution (1ml in 2ml normal saline) via nebuliser

REFER

- Children with **persistent asthma**
- Children with **difficult to control asthma**
- Children with **a poor response** to treatment
- Young infants **less than 3 months** of age

TREATMENT OF AN ACUTE ATTACK OF WHEEZING IN A CHILD WITH RECURRENT WHEEZE



(A) INHALED BRONCHODILATOR

- **Salbutamol nebuliser soln (5mg/ml) or other B2 agonist**
  1 ml in 2ml normal saline

OR

- **Salbutamol MDI (100ug/ puff) 5 puffs via spacer given as 1 puff every 10secs**

OR

- **Subcutaneous Adrenalin**
  Adrenalin (1:1000) 0.01ml/ kg to max of 0.3ml given subcutaneously

(B) ORAL STEROID

- Prednisone (5mg/ tab) 1-2 mg/kg

(C) HOME TREATMENT

- Salbutamol (or other B2 agonist) MDI & spacer 2 puffs (200ug) four times a day for 5 days *or if unavailable*
  Salbutamol 1mg po tds if < 1 yr for 5 days
  Salbutamol 2mg po tds if > 1 yr for 5 days
- Advise not to smoke in house
  AND if 2 inhaled bronchodilator treatments were given
- Prednisone (5mg/ tab) 1-2 mg/kg/day for 5 days
  If more than 2 course of prednisone were required in prior 4 months, REFER
- **No antibiotics are needed for treatment of asthma**
- Continue any maintenance asthma therapy

(D) FOLLOW UP

- Caregivers should seek help IMMEDIATELY if:
  - Child's breathing becomes difficult
  - Child's breathing becomes fast
  - Child is unable to eat or drink
  - Child becomes lethargic or restless
  - Child becomes blue or very pale
- REFER for long term management of children with persistent asthma

Contributors

K Blackbeard (PAWC: METRO), L Camagu (CMC), K Cloete (PAWC: Metro), C Coetzee (PAWC: W Coast), G Hussey (CHU, UCT), M Johnson (PAWC: Overberg), M le Roux (PAWC: Metro), E Malek (PAWC: Metro), B Mash (CHSO), S Mehtar (PAWC: S. Cape), A Morison (PAWC), M Naidoo (CTCC), E Perez (CHSO), E Prins (PAWC: Overberg), D Sanders (UWC), S Schaaf (TBH: US), G Schoor (CHSO), A Smith (CMC), G Swingler (RXH: UCT), D van der Merwe (CTCC), B van der Merwe