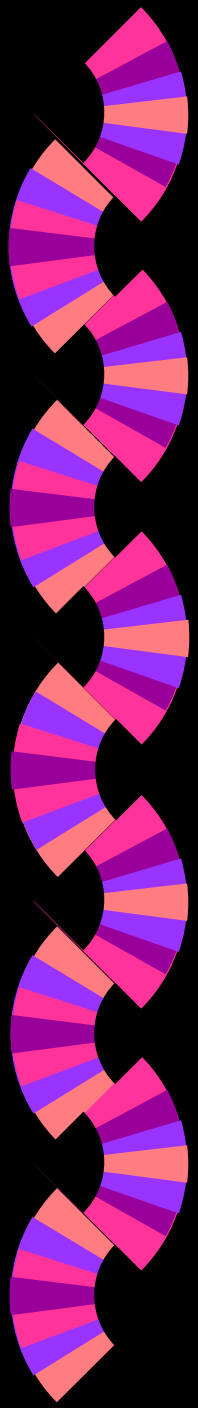

What You Need To Know About Asthma But Were Too Afraid To Ask

Presented by

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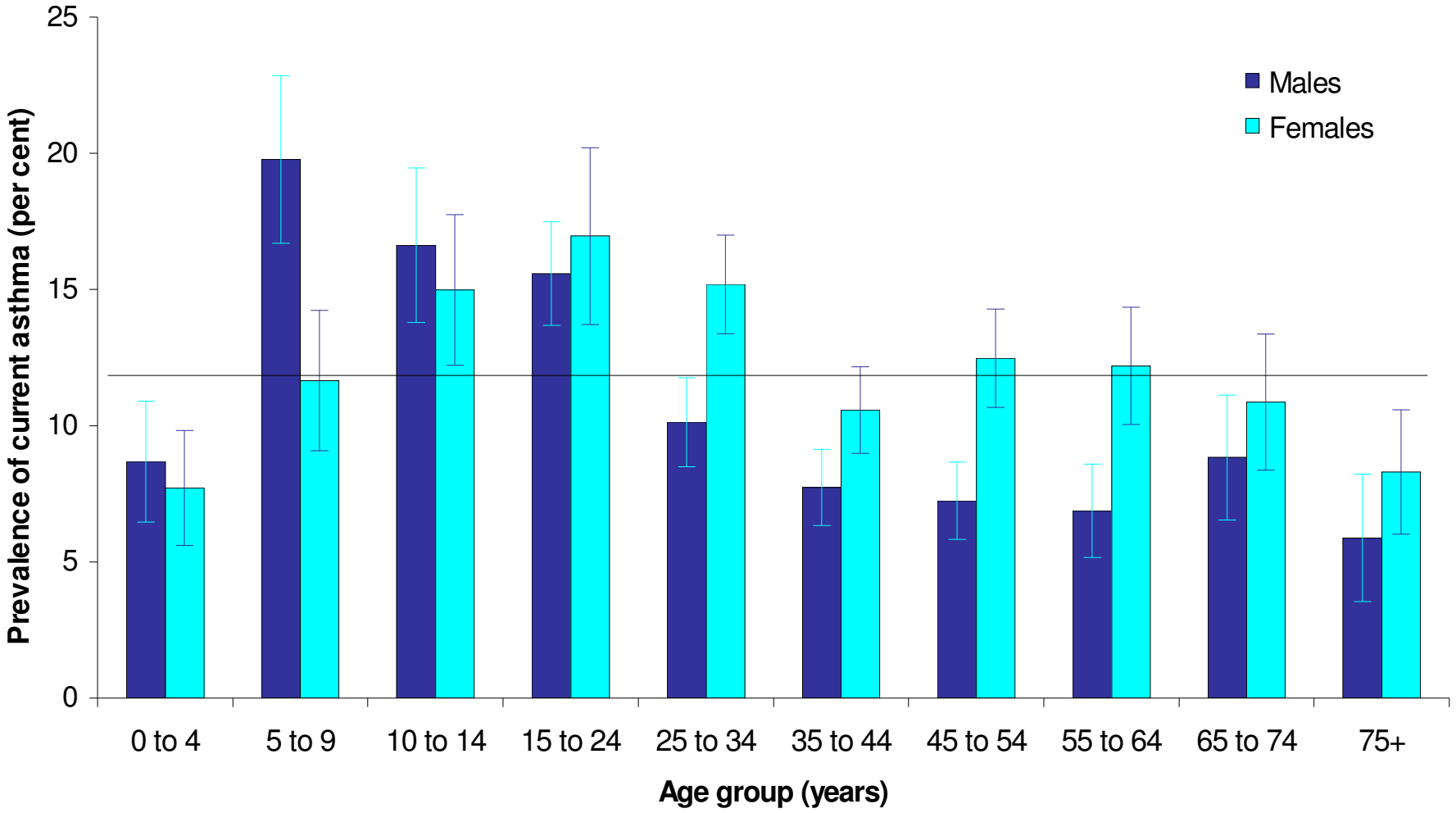
Prevalence and Mortality

14 -16% of children and 10 -12% of adults have asthma

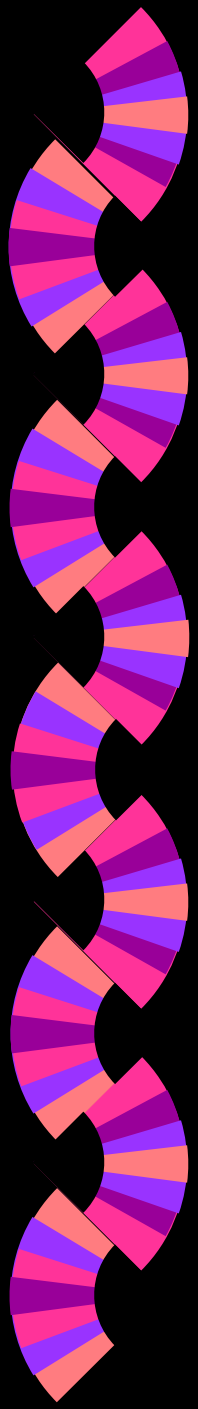
Many deaths are preventable

- In 1992, 759 Australians died from asthma
- In 1993, 777 Australians died from asthma
- In 1994, 825 Australians died from asthma
- In 1995, 749 Australians died from asthma
- In 1996, 730 Australians died from asthma
- In 1997, 715 Australians died from asthma
- In 1998, 685 Australians died from asthma
- In 1999, 424 Australians died from asthma
- In 2000, 454 Australians died from asthma
- In 2001, 422 Australians died from asthma
- In 2002, 397 Australians died from asthma

Prevalence of current asthma, by age group and sex, Australia, 2001



Source: ABS National Health Survey 2001.



Role of Spirometry

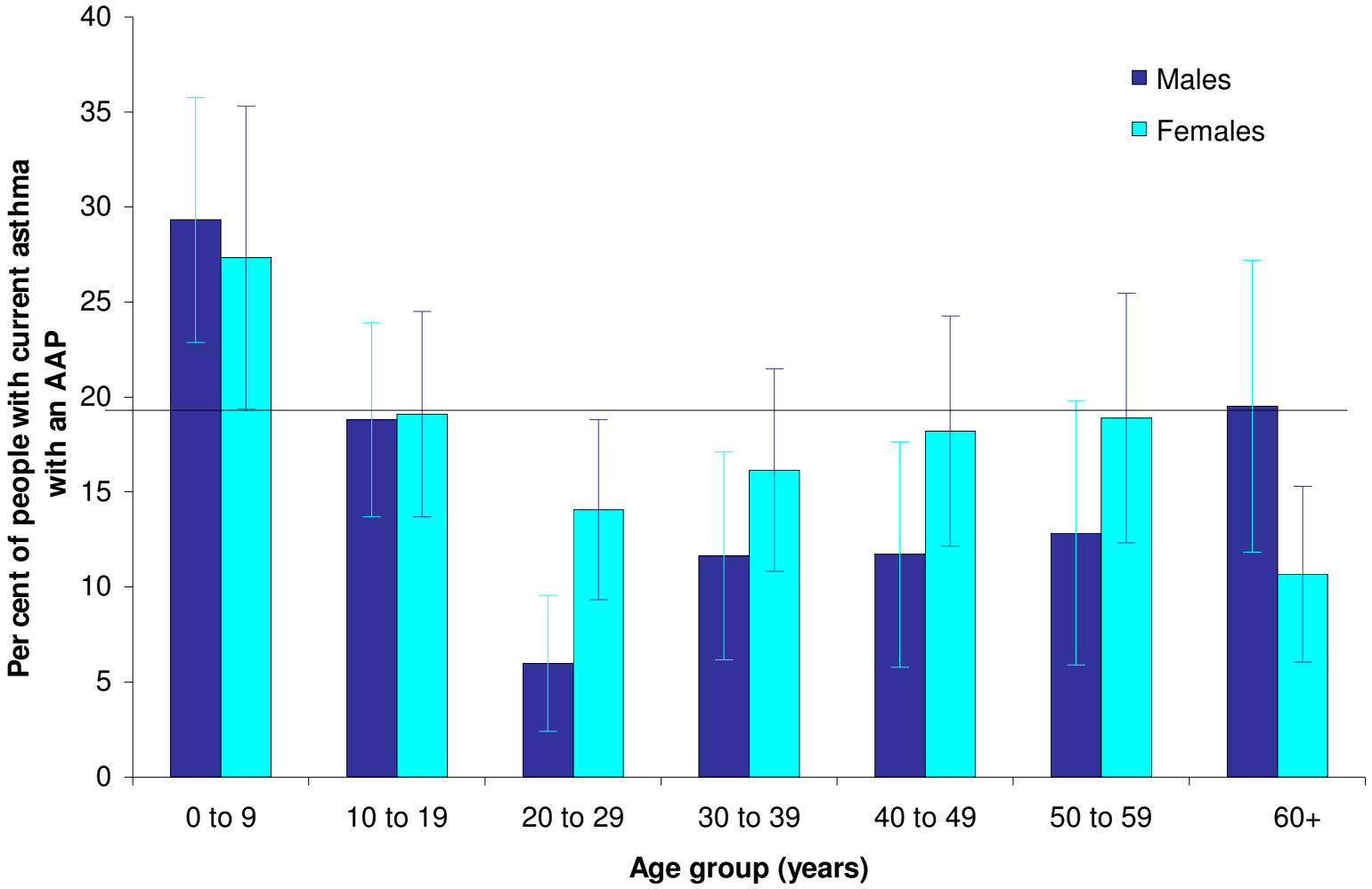
- Should be part of routine assessment of patients with asthma and any lung disease
- Important as objective measurement of lung function
- Detects large and small airway problems
- Can measure baseline and any deterioration
- Needs to be conducted and interpreted correctly

Asthma Action Plans

A written plan should include:

- Regular medication and best peak flow if known and how the person is when well
- Symptoms or peak flow requiring additional medication & what to take
- Symptoms or peak flow requiring urgent medical attention
- Where & how to get urgent assistance

Proportion of people with current asthma with a written asthma action plan, by age group and sex, Australia, 2001



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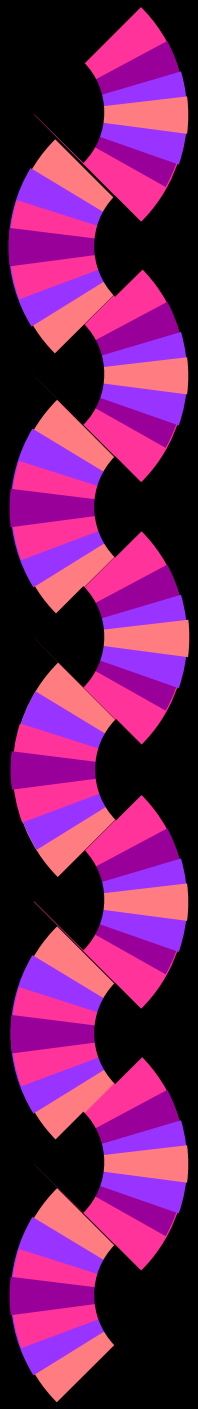


Asthma Medication consists:

"Relievers"

- Relieve the constriction

"Preventers"

- Prevent the inflammation

"Symptom Controllers"

- Provide long acting relief of constriction

Reliever Medications

Bronchodilators

- Ventolin
- Airomir
- Asmol
- Bricanyl

- Atrovent
- Nuelin

Symptom Controllers

- Long acting bronchodilators
  - Oxis
  - Serevent

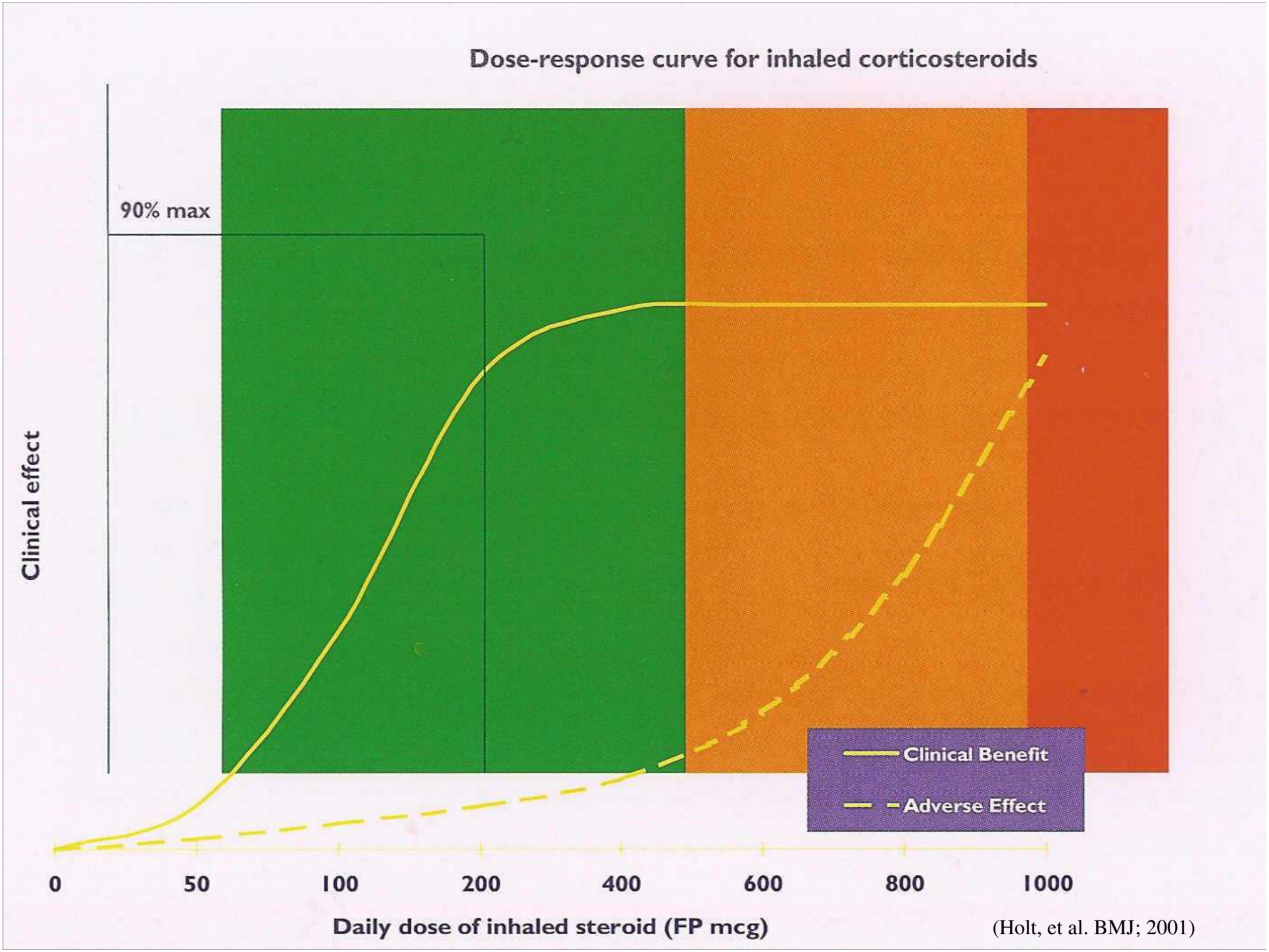
Preventer Medications

Anti-Inflammatories

- Corticosteroids
  - Pulmicort
  - Qvar
  - Flixotide
  - Prednisolone
- Non Corticosteroids
  - Intal
  - Tilade - not being promoted
- Combination therapy
  - Seretide
  - Symbicort
- Leukotriene antagonists
  - Singulair -asthma tablet

Issues re medication use

- Asthma was the 6th most common problem managed by GP's in 2000 / 01
- Australian doctors use higher doses of ICS than those of the USA or Europe
- Large numbers of patients on ICS are receiving doses more than double than recommended dosage
- Doses are not sufficiently back titrated
- Doctors tend to over estimate asthma severity & patients under estimate it



(Holt, et al. BMJ; 2001)

Inhaled corticosteroids Recommended doses-Adults

Most clinical benefit of ICS from low to moderate doses

Asthma severity will determine the level of therapy

	Low	Medium	High
BDP	up to 250	up to 500	500 + Daily
FP	up to 250	up to 500	500 + Daily
BUD	up to 400	up to 800	800 + Daily

NAC 2003

Mistakes in MDI Technique by Patients

- 77.5% of patients (501) made at least one error in demonstrating their MDI use Larsen et al 1994 J of Asthma
- *Most common mistakes:*
  - Failure to breath out fully before actuation
  - Incorrect timing of actuation

- 71% adults with asthma (4,078) misused MDI

  Giraud et al 2002 Euro Resp J
- 47% of this misuse was due to poor co-ordination
- Asthma was less stable in misusers than in correct users

Mistakes in MDI Technique by Health Professionals

- 34% medical residents made errors in correct inhaler use

  Evans 1993 Thorax

Most common mistakes:

- Failure to hold breath for at least 5 secs - 54%
- Failure to shake MDI before use - 40%
- Actuating MDI> once during a single breath - 29%

- Most training paediatricians did not use MDI's or spacers correctly and most were never formally instructed in their use

  Amirav et al 1994 J Allergy

- Approx 22-56% of health care providers have never received any formal education on device usage

  Slader et al 2002 Pharmacist

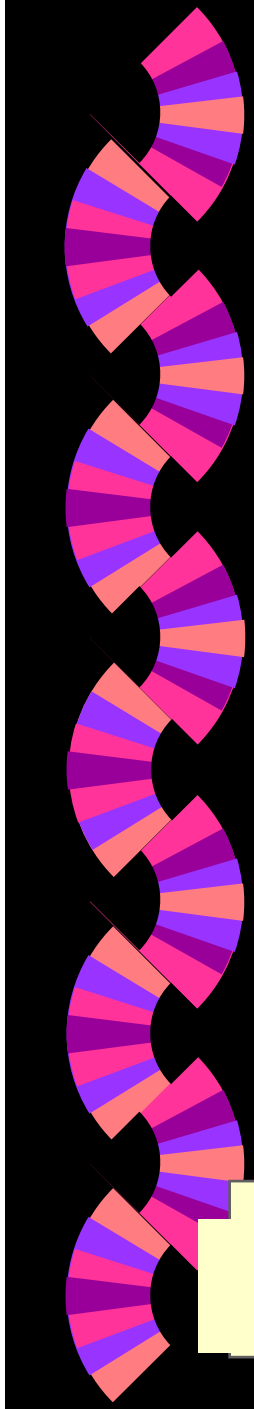
Correct Use of Metered Dose Inhaler

1. Remove cap from inhaler
2. Shake the inhaler
3. Breathe out normally
4. Place inhaler between teeth with lips closed around mouthpiece
5. Tilt chin up slightly
6. Commence slow deep breath in
7. Press down on canister to release dose
8. Continue to deep breathe in slowly and deeply
9. Hold for 5-10 seconds

Spacers vs Nebulisers

- Metered Dose Inhaler (MDI) + spacer is equal to or better than nebuliser
- Increased bronchodilation with spacer + MDI
- Maximum benefit faster 60 mins spacer, 90 mins nebuliser
- Shorter time in emergency
- Cheaper to buy and maintain
- Easier, more convenient - no electricity
- Less side effects
- Less drug to get the same effect

Asthma Attack First Aid



Step 1.

Sit person down & remain calm

Step 2.
4 puffs of a reliever via spacer one at a time

Step 3.

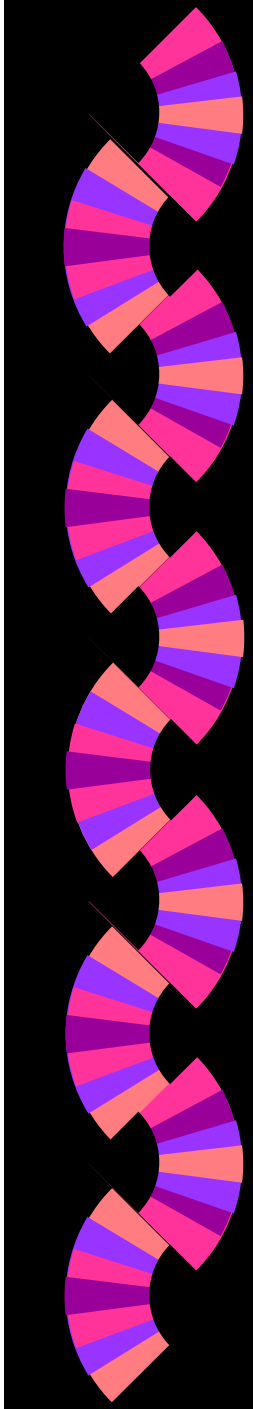
Observe for 4 mins., if no improvement give another 4 puffs

No improvement
or sudden deterioration

Improvement

Stop treatment.

Asthma Attack



Step 4.

Get help call an ambulance (000)

Continuously repeat steps 2 to 3 until ambulance arrives

Key Elements of Asthma 3+ Visit Plan

- Patient must have moderate to severe asthma
- At least 3 asthma related consultations in the previous 4 weeks to 4 months
- Planned recalls for at least 2 of the consultations
- Diagnosis and assessment must be documented
- Patient's asthma medications must be reviewed
- Provision of a written asthma action plan and self management education to the patient
- Review of asthma action plan

Asthma 3+ Visit Plan
Who is eligible?

This initiative is for patients with moderate to severe asthma. Severity needs to be assessed when the patient is stable.

Patients are eligible if they:

- have symptoms on most days
- use preventer medications
- use a bronchodilator 3 times or more a week
- have had a hospital attendance or admission following an acute attack

Asthma 3+ visits in Australia

- 2,000.000 people in Australia in asthma
- 400,000 - 800,000 may be eligible for 3+plan
- 60,000 3+ plans had been completed by end of 2003 25%+ of plans not completed
- In Whitehorse Div of GP, 97% of completed 3+ plans are from practices with an asthma educator

What people with asthma need to know

- What asthma is - particularly inflammatory nature.
- The difference between reliever and preventer and controller medications.
- How to correctly use devices. PFM, puffer etc.
- What are their trigger factors. How to avoid them.
- How to tell if their asthma is getting worse - monitoring.
- What to do if their asthma gets worse - Asthma Action Plan.
- How to adjust their medication using their action plan.
- How to avoid exercise induced asthma - Pre medicate, warm up
- Importance of quitting smoking