Asthma and COPD

Some highlights
How the lungs work

- Nose & nasal cavity
- Throat (pharynx)
- Voice (larynx)
- Windpipe (trachea)
- Breathing tubes (bronchi & bronchioles)
- Lung
What is asthma

- Sensitive airways
- Inflammation and swelling
- More mucus produced
- Airways become narrow
- Muscles tighten around airways
- Breathing is difficult
Symptoms of asthma

- Dry cough (children often get this at night time)
- Wheezing
- Shortness of breath
- Tightness in chest
Risk factors for asthma

- Family history
- Allergies
- Environmental triggers
Asthma triggers

- Allergens you breathe e.g. pollen, dust mites, animal hair
- Irritants you breathe e.g. perfumes, air pollution
- Colds and flu
- Exercising very hard
- Temperature changes
- Reflux disease
- Emotions
- Some medicines
- Work related triggers e.g. chemical fumes in factories, bakers’ flour dust, wood chip dust
Diagnosis of asthma

- History of symptoms
- Family history
- Special lung functions tests
Goals of asthma management

• No asthma symptoms during day or night, including cough
• Sleep through the night
• Not needing reliever medicine
• Best possible lung function
• No missed school or work
• No hospital or emergency visits
• Few side effects from medicines
Medicines in asthma

• Short-term medicines
  - inhaled bronchodilators (open up airways for quick relief)
  - short course of oral corticosteroids for flare up

• Long term medicines
  - inhaled corticosteroids
  - oral montelukast
Help maintain control of asthma and prevent symptoms
Control asthma in pregnancy and breastfeeding

- Untreated asthma puts baby at risk
- Safe medicines are available
- No special diet required
- Prolonged exclusive breastfeeding will not prevent asthma
- Hydrolysed soy or soy formula over breastfeeding just to prevent asthma is not recommended
What is COPD?

- COPD stands for **Chronic Obstructive Pulmonary Disease**
- Mainly seen in older people
- Symptoms get worse with time
Symptoms of COPD

- Chesty cough (lots of mucus)
- Wheezing
- Shortness of breath with activity or even at rest
- Tightness in chest
- Tiredness (fatigue)
- Increased chest infections
- Blue tinge to skin
Risk factors for COPD

- Smoking
- Indoor or outdoor air pollution
- Work-related chemical fumes and gases
- Ageing
- Genes – alpha-1 antitrypsin deficiency
- Repeated chest infections
Medicines for COPD

- Short acting bronchodilators for quick relief
- Long acting anticholinergic medicines added
- Combination medicines (LABA/ICS)
- Antibiotics – for chest infections
- Ensure vaccinations up to date
Are you at risk of COPD?

- Are you over 35?
- Do you or did you ever smoke?
- Do you or did you work around gases, fumes or dust at work?
- Do you feel that simple activities, like walking, are getting more difficult?
Get screened for COPD

- In pharmacies
- Screening service only
- Helps identify if you are at risk
- Refers to doctor for further tests
Self management

- Action plans – every person with asthma or COPD should have one
Types of inhalers

- Pressurised metered dose inhaler - chemical propellant pushes medicine out of inhaler
  - standard
  - breath activated

- Dry powder inhaler – no chemical propellant
Inhaler technique is important

- Many people have incorrect inhaler technique
- Different devices require different techniques
- Incorrect technique means your medicine will not be effective
Spacers for inhalers

- Use spacers with pMDIs
- More medicine gets into the lungs
- No hand and breath co-ordination required
- Young children should use spacers with all pMDIs (for reliever and preventer medicines)
- Adults who use inhaled corticosteroids via a pMDI should use a spacer to reduce side effects of oral thrush
- Care for your spacer
- Have your spacer checked every 6–12 months