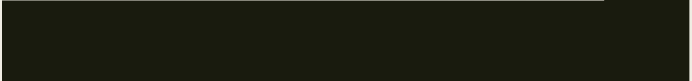




GUIDELINES FOR TRAINING HEALTH CARE PROVIDERS

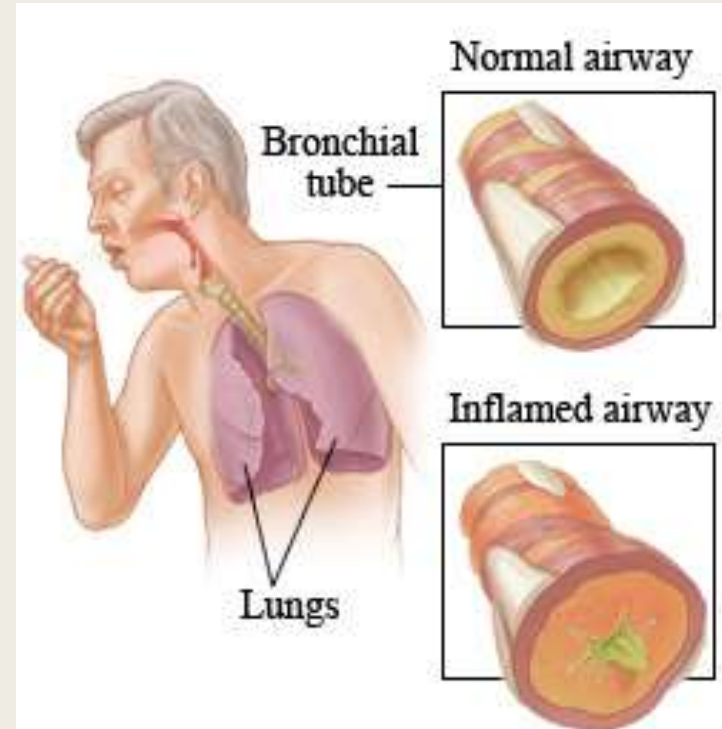
MANAGEMENTS OF CHRONIC RESPIRATORY DISEASES.

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What are chronic respiratory diseases (CRDs)?

- A group of diseases that affects the airways and other structures of the lungs.



Extend of the problem.

- Public health problem

- Globally – More than 4 million deaths per year.

More than hundred of million of people chronically ill.

- Sri Lanka – It is a problem but limited information.

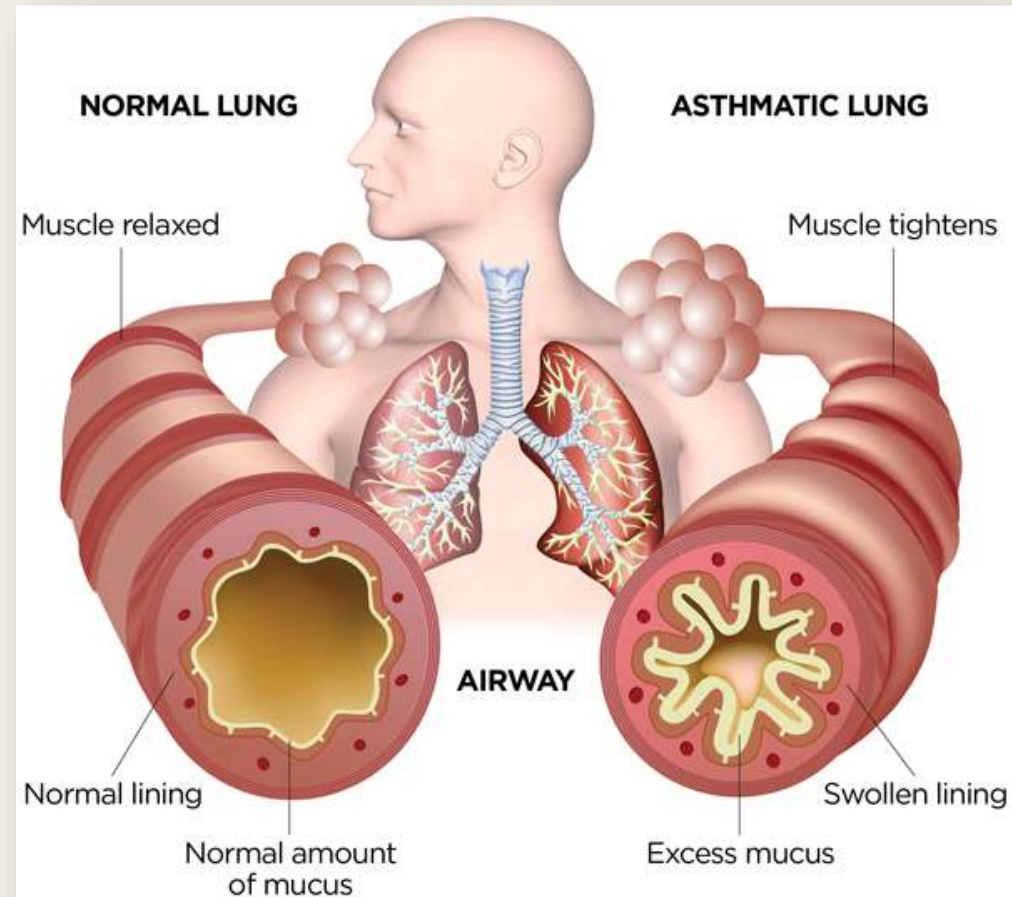
It affects social , psychological and economical status of the population.

Common CRDs,

- Bronchial Asthma (BA)
- Chronic obstructive pulmonary diseases (COPD)
- Interstitial lung diseases (ILD)
- Bronchiectasis
- Malignancies
- Occupational lung diseases
- Obstructive sleep apnoea(OSA).

Asthma

- Signs and symptoms
 - a. Wheezing
 - b. Breathlessness
 - c. Chest tightness
 - d. Cough



When to suspect

- Wheeze and shortness of breath
- Cough and chest tightness, symptoms worse at night and early in the morning.
- Onset at young age.
- Family history of asthma or allergy.
- Associated conditions such as emphysema, rhinitis and hay fever.

Chronic obstructive pulmonary diseases (COPD)

- Progressive life threatening lung disease.

- Persistent reduction of airflow
- Causes breathlessness
- time to time getting symptoms

When to suspect

- Gradual increase the breathlessness.
- Presence of risk factors
 - a. Smoking
 - b. Indoor and outdoor air pollution
 - c. Occupational dusts
 - d. Frequent respiratory infections in childhood.

Symptoms

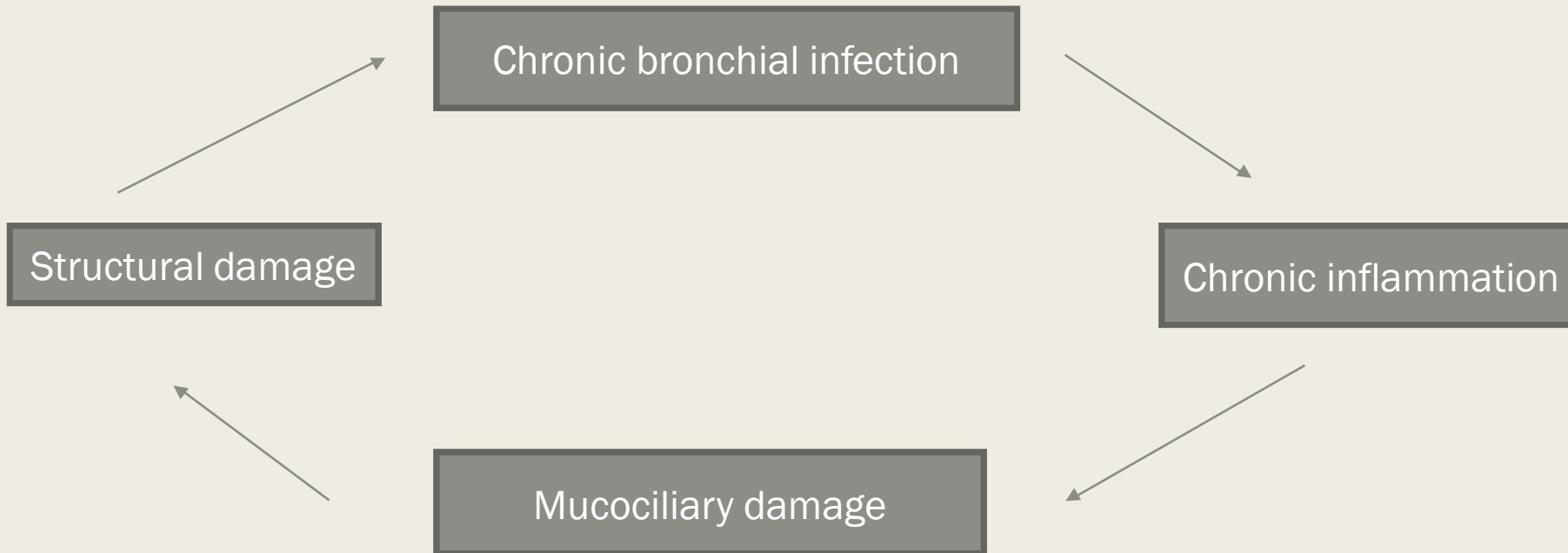
- Chronic cough
- Sputum production
- Dyspnoea
- Barrel chest
- Expiratory wheezing
- Hyper-resonant



Investigations

- Spirometry
- ECG
- Chest X ray
- Six minutes walking test

Bronchiectasis



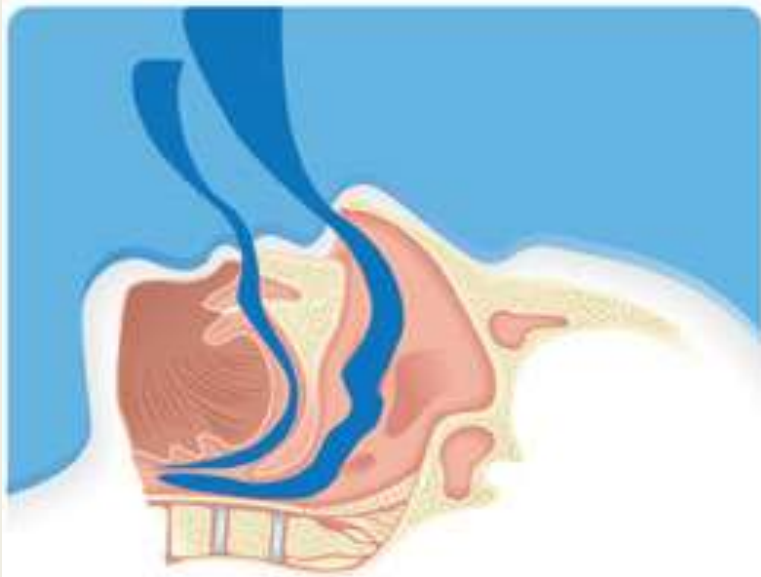
Obstructive Sleep Apnoea

- Commonest sleep disordered breathing – Stop breathing during sleep due to upper airway closure

Symptoms

- a. Snoring
- b. Day time sleepiness
- c. Stop breathing (apnoea)

Normal Airflow



Wide Airway



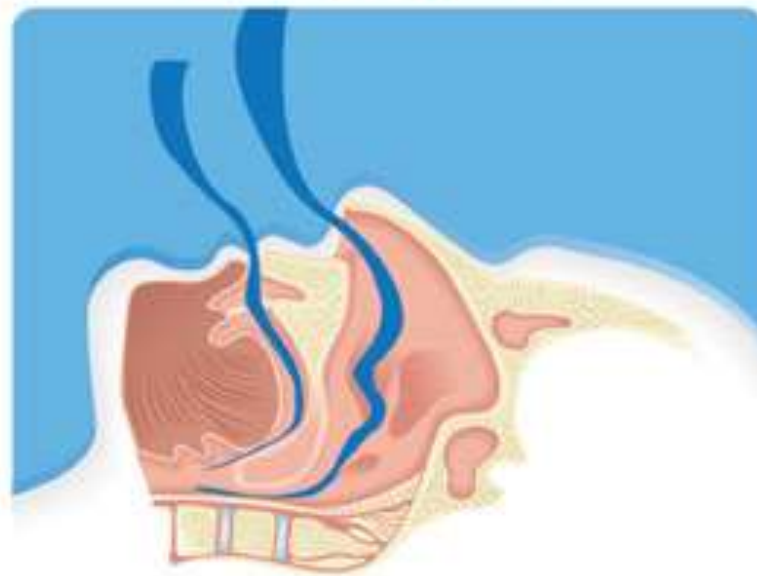
Normal Oxygen



Healthy Heart



Sleep Apnea



Narrowed Airway



Low Oxygen



Stressed Heart



Who are the people at risk of OSA ?

- Snoring
- Obese - BMI >30
- Day time sleepiness
- Polycythemia
- Difficult to control Diabetic mellitus and hypertension



- Obesity – Lifestyle modification
Advice weight loss
(Refer obesity Guidelines)
- Screening for obstructive sleep apnoea
Screening tool - Stop Bang questionnaire.



Does this patient have an acute presentation that needs emergency care?



Yes



Refer Algorithm 01



No



Refer Algorithm 02

Algorithm 01

Patients who need emergency care

Use of accessory muscles of neck, use of intercostal muscles or 'tracheal tug' during inspiration or subcostal recession (abdominal breathing)

Inability to complete a sentence in one breath due to dyspnoea

Obvious respiratory distress

Oxygen saturation 90–94% *

Respiratory rate > 30

Systolic BP < 90mmHg or
Diastolic BP < 60mmHg

Need immediate hospital admission

** diagnosed patients with COPD known to have low oxygen saturation on air do not require admission unless there is worsening of their symptoms and/or haemodynamic instability.*

Any patient coming with shortness of breath

and

with reduced or loss of consciousness

Features of anaphylaxis (urticarial rash, generalized flushing, swelling of throat and mouth, abdominal pain, nausea and vomiting)

Exhaustion

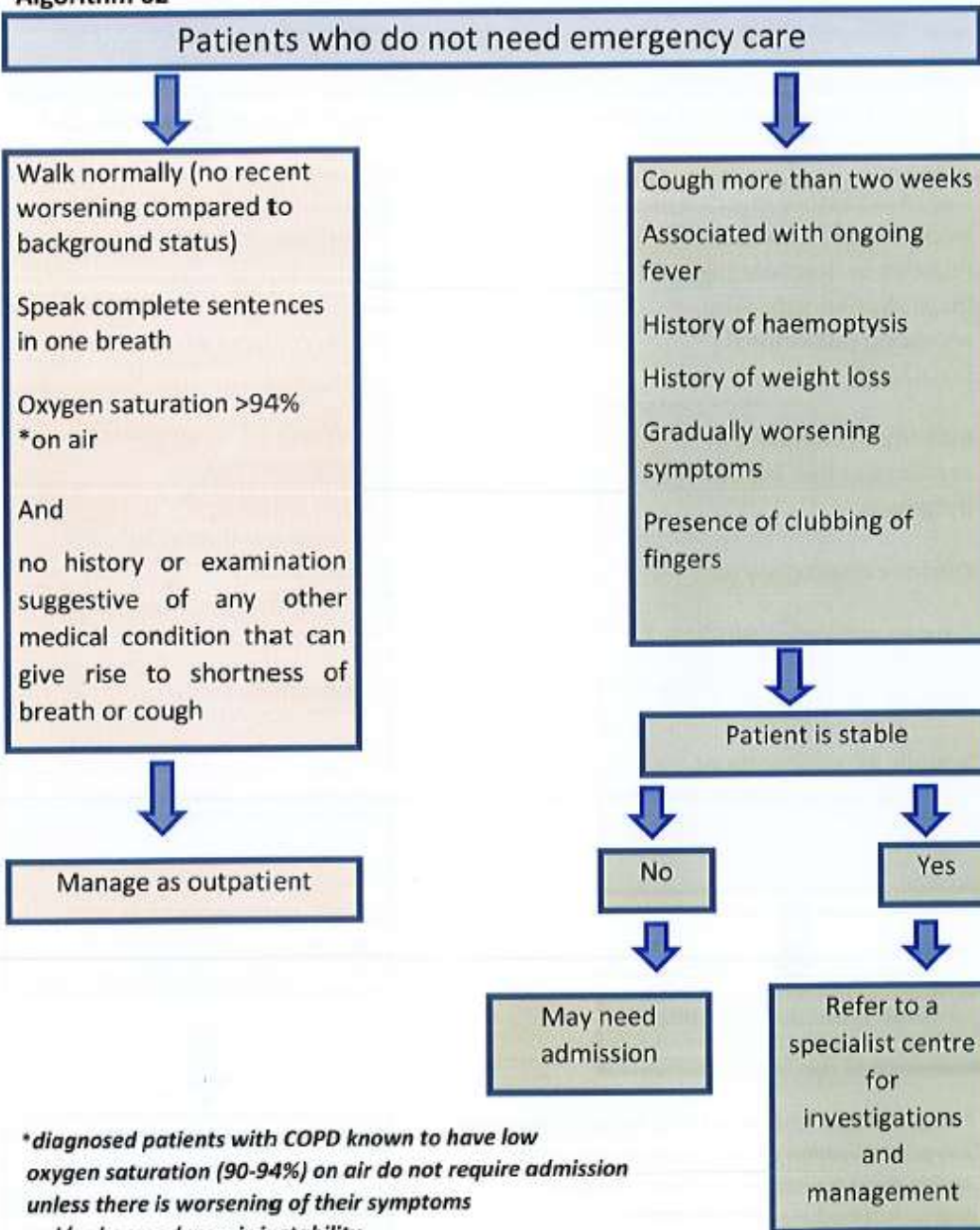
Cyanosis

Oxygen saturation < 90% *

Poor respiratory effort, soft/absent breath sounds

Life threatening conditions require immediate transfer to a specialist centre

Algorithm 02



Causes for exacerbations of chronic respiratory diseases

- Infections
- Withdrawal of prophylaxis treatment
- Complications (eg: pneumothorax, pleural effusion, right heart failure)

Other conditions that require hospital admission and assessment or transfer for specialist opinion

Shortness of breath associated with

Urticarial rash (consider anaphylaxis)

Chest pain.

Basal crepitations

Unilateral wheeze

Elevated JVP

Bilateral ankle oedema

Minimal or clear lungs (consider metabolic acidosis, neurological weakness, or pulmonary embolism)

Stridor

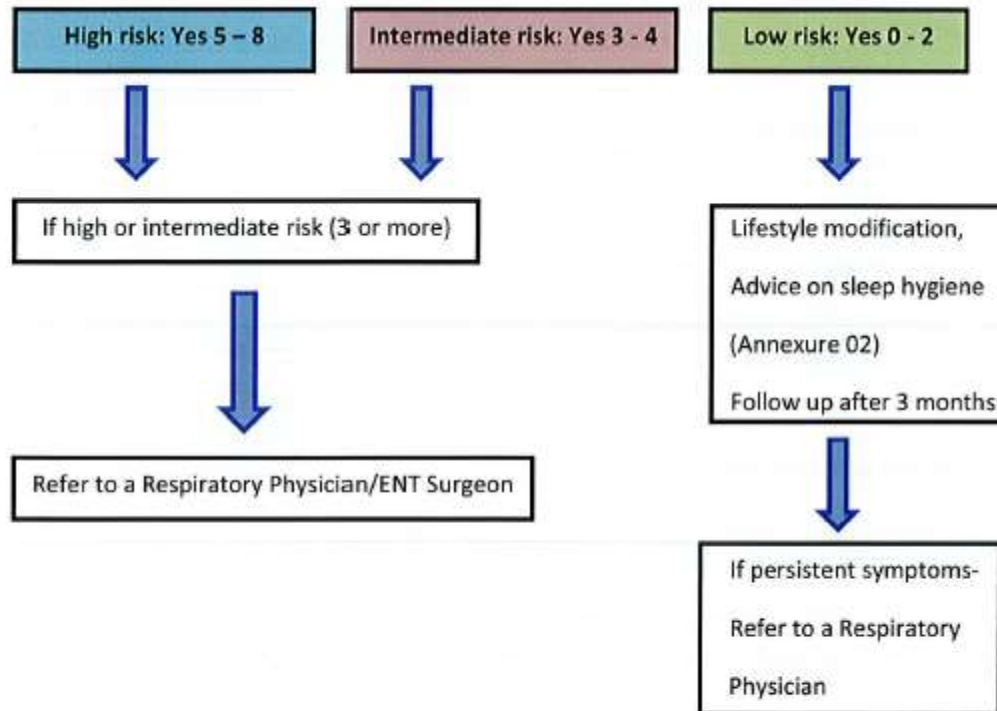
Suspected foreign body aspiration

Anaemia

Clinically suggestive of other lung pathology (pneumonia, pleural effusion, pneumothorax)

Pregnancy

STOP		
Do you SNORE loudly (louder than talking or loud enough to be heard through closed doors)	Yes	No
Do you often feel TIRED , fatigued, or sleepy during daytime	Yes	No
Has anyone OBSERVED you stop breathing during your sleep	Yes	No
Do you have or are you being treated for high blood pressure	Yes	No
BANG		
BMI more than 35kg/m ²	Yes	No
AGE over 50 years old	Yes	No
NECK circumference > 16 inches (40cm)	Yes	No
GENDER: Male	Yes	No
TOTAL SCORE		



In case of obesity - life style modification advice/ weight loss/ refer to obesity guideline

Thank you