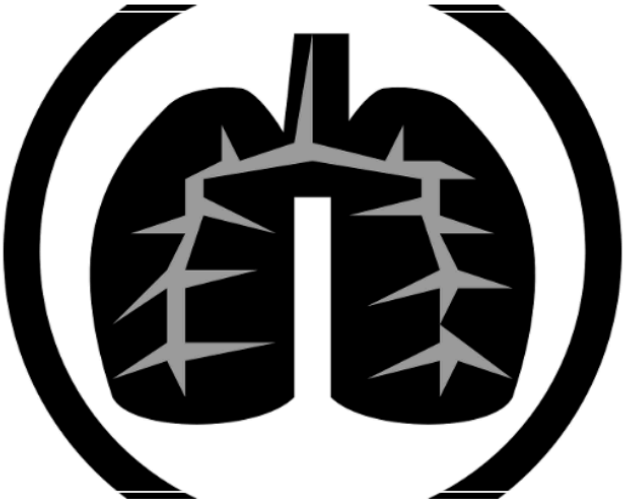

Quick adult respiratory assessment.

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The following guideline is by no means a complete or thorough respiratory assessment (For example, I have not covered palpation or percussion).

It is instead, one example of a structured approach to performing a quick respiratory assessment on a new patient, or a patient who requires rapid re-assessment (leave out the history taking part).

Key descriptors are in bold to help you improve your documentation vocabulary.

Presenting complaint:

Ask questions about:

- Cough.
- Sputum
- Haemoptysis
- Dyspnoea

- Wheeze
- Chest pain
- Fever
- Hoarseness

Cough: is it dry or productive. If **productive**, what sort (and quantity) of sputum is being produced?

Purulent (yellow or green) may indicate bronchiectasis or lobar pneumonia.

Dark, offensive smelling may indicate lung abscess.

Pink frothy secretions (not actually sputum) is associated with pulmonary oedema.

Haemoptysis (coughing up blood): is a red flag for further investigations. May be due to Ca lung, TB, pneumonia, pulmonary infarction.
Dyspnoea: (Acute, progressive or paroxysmal).
Dyspnoea worse whilst patient is lying down more likely to be of cardiac origin.

Dyspnoea can be graded from I to IV

1. Class I: Dyspnoea on heavy exertion.
2. Class II: Dyspnoea on moderate exertion
3. Class III: dyspnoea on minimal exertion
4. Class IV: dyspnoea at rest.

Wheeze: Listen for wheeze audible without auscultation. Indicates narrowing of distal airways.

Can be caused by asthma, chronic obstructive airways disease, airway obstruction by tumour.

Always consider presence of a foreign body when patient has wheeze.
Especially in young children.
Chest pain: If from a respiratory source, usually pleuritic in nature (i.e. sharp and worse on deep inspiration/coughing).

Always consider cardiac origins & perform ECG on any patient presenting with chest pain.
Fever: history of night fevers may indicate TB or pneumonia.

Hoarseness: any patient in respiratory distress with a hoarse voice is waving a red flag. Seek prompt assessment by senior doctor.

Past History:

Ask questions:
Previous respiratory illness.
Or previous abnormal chest X-rays.
Current medications. Many meds can produce respiratory problems including oral contraceptive (pulmonary embolism), cytotoxic agents (interstitial lung disease), beta-blockers (bronchospasm), ACE inhibitors (cough).

Is there history of possible exposure to occupational/domestic irritants such as moulds, wood dust, spray paint, asbestos, coal etc.?

Does the patient have high exposure to animals including birds (Q fever, psittacosis)?

Smoking: How many cigarettes/packets a day & for how long?

Inspect:

Respiratory Rate | Rhythm | Depth | Effort.

Increased respiratory rate may be due to pain, fear/apprehension or hypoxia.

Remember respiratory rates above 30 (adult) cannot be maintained for long and are usually an indication of impending respiratory failure or metabolic acidosis.

Decreased resp rate may be due to narcotics, decreased core temp.

Intercostal recession.

Use of **accessory muscles** (such as the scalene muscles), or breathing through pursed lips.

Position. Does the patient prefer to sit forward or ‘tripod’?

Anatomical deformities of the thorax.

Evidence of trauma of the thorax.

Cyanosis. Central | Peripheral.

Movement of chest wall. Document any **asymmetrical chest wall movement**.

Decreased movement on one side may indicate pneumothorax, pleural effusion, consolidation, pulmonary fibrosis or flail chest.

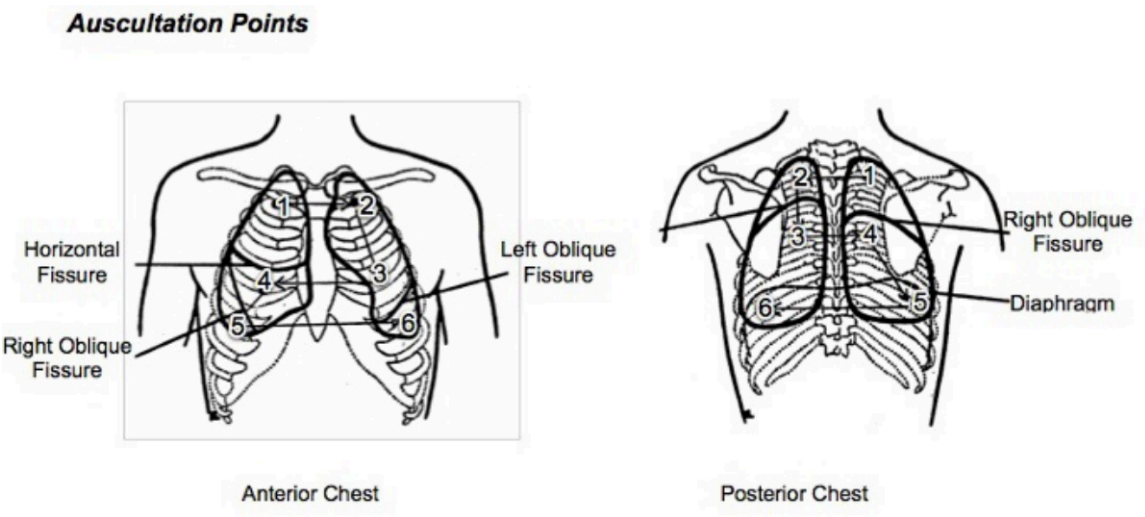
Document as symmetrical or asymmetrical, chest excursion.

Oxygen saturation. **Document any use of oxygen & delivery device.**

Level of consciousness.

Auscultate:

Ideally, position patient upright and have them breathe through their mouth. Using your stethoscope listen to breath sounds, comparing each side with the other. You are listening for quality, intensity, and for the presence of adventitious (unexpected) sounds.



Quality: The normal breath sounds heard over the lung fields are referred to as **vesicular**. They are usually louder and longer on inspiration and there is no gap between inspiratory and expiratory sounds.
Bronchial breath sounds are caused by turbulence in the large airways. They are higher in pitch, hollow, tubular sounds. They are louder and longer on inspiration than expiration, and there is often a gap between inspiratory and expiratory (auscultate over your trachea or manubrium to get an idea of what they sound like).

If you can hear bronchial breath sounds when auscultating your patient's chest, it is because the sounds are being conducted to the peripheral lung fields from the large airways by consolidation (fluid or lung tissue).
Intensity: Some authors recommend documenting intensity rather than air entry. Reduced intensity on one side of the chest may be due to pleural effusion, pneumothorax pneumonia etc.
Adventitious sounds: (Listen to sounds here) - https://www.easyauscultation.com/

There is often much confusion about documenting these sounds, but to make it simple, there are just two (OK maybe three).
Wheeze: Resulting from distal airflow obstruction. They are continuous, high pitched….er, sort of hissing sounds caused when air flows through airways narrowed by secretions, spasm, lesions or foreign bodies. (Don't forget: your patient is an asthmatic a peek flow assessment should be part of your assessment.).

Beware the silent chest. If present with other signs of respiratory distress, it may signify total peripheral airway obstruction. Seek assessment by senior doctor.

Crackles: Described as interrupted, non-musical sounds. They are caused by the distal airways opening during inspiration and collapsing during expiration. I think of them as static in the lungs.

They may also be further described as:

- Fine: sound of hair being rubbed between the fingers.
- Medium: sound of dreadlocks being rubbed between the fingers.
- Coarse: characteristic unpleasant crackling, gurgling quality.

Pleural friction rub: a continuous or intermittent grating sound as thickened pleural surfaces rub together during breathing. Indicative of pleurisy secondary to pneumonia or pulmonary infarction.

Stridor: Stridor is a loud strangulating sound during inspiration indicating obstruction of the trachea or larynx (unless proved otherwise) requiring immediate review by a senior doctor.

Stridor is an upper airways obstruction and can be clearly auscultated over the patient's trachea.
Finally, always keep a close eye (and ear) on any patient who presents with respiratory distress.

For the ED nurses: Remember patients that have arrived by ambulance may have had treatment that has temporarily improved their condition. Listen closely to the paramedic handover to get an idea of their initial condition and have a high index of suspicion that they may deteriorate.
If your assessment and/or your gut feeling is that this patient is deteriorating, seek assistance promptly.

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