

6. Respiratory		
PATIENT SECTION		GP/NURSE SECTION
6.1 Have you experienced any of the following in the past 12 months? <input type="checkbox"/> Increased frequency of Respiratory Infections (> 2 or 3 per year) <input type="checkbox"/> Shortness of Breath (SOB) and/or tightness in chest <input type="checkbox"/> A decline in function or fatigue (tiredness) from shortness of breath <input type="checkbox"/> Decreased ability to clear secretions (e.g. having a "wet cough"). <input type="checkbox"/> Coughing up blood & recent weight loss <input type="checkbox"/> New leg swelling Did any of the above result in hospital admission? <input type="checkbox"/> Yes <input type="checkbox"/> No		Examination Findings: PEF _____ Vital capacity _____ litres Auscultation Findings: <input type="checkbox"/> Review cause of hosp admission
6.2 Have you had the fluvax injection in the last year? <input type="checkbox"/> Yes <input type="checkbox"/> No Have you had a pneumovax injection before? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6.3 Do you have any of the following symptoms? <input type="checkbox"/> Excessive snoring or episodes when you stop breathing during the night? <input type="checkbox"/> Excessive sleepiness or tiredness during the day? <input type="checkbox"/> Waking with early morning headache? <input type="checkbox"/> Difficulty concentrating / learning new things <input type="checkbox"/> Other Describe _____ _____		Does patient need further evaluation with the Epworth Sleepiness Scale <input type="checkbox"/> Yes <input type="checkbox"/> No
6.4 Have you ever had a sleep study? <input type="checkbox"/> Yes <input type="checkbox"/> No If you have a CPAP or BIPAP machine, have you encountered any problems with your mask or machine? <input type="checkbox"/> Yes <input type="checkbox"/> No		Does person need referral for: A sleep study? <input type="checkbox"/> Yes <input type="checkbox"/> No Refer to sleep Dr. <input type="checkbox"/> Yes <input type="checkbox"/> No

Respiratory complications are a leading cause of death during as well as after the first year following spinal cord injury. The 4 most common respiratory complications are Respiratory Failure, Atelectasis, Pneumonia and Pulmonary Embolus. Obstructive sleep apnoea is also common (up to 40% of patients with SCI).

Recommendations for people with SCI are:

- ALL individuals with tetraplegia and high paraplegia (>T8) would benefit from a Pneumococcal vaccination (once around time of injury and at 50 and 65 years of age) and annual Influenza vaccination.
- Check of resting respiratory rate and vital capacity every year. Consider respiratory insufficiency (particularly sleep apnoea) if VC trending downward or there are symptoms of tiredness and sleepiness during the day or elevated waking BP.
- All symptoms of respiratory infection must be treated seriously with assisted coughing, physiotherapy & antibiotics if appropriate.

Risk factors for Respiratory Complications include

- Greater degree of neurological impairment (Higher neurological level, ASIA A Complete)
- Age >50 years, Increased age at injury, Increased duration of injury
- Recent hospital admission or bed-rest, no previous immunisations e.g. Pneumovax, Fluvax
- Smoking, Asthma, Chronic Lung diseases e.g. bronchitis, emphysema, bronchiectasis
- Severe postural deformity (decreases mobility of the chest), Scoliosis (sideways lean deformity), Kyphosis (slumped deformity)
- Obesity, Abdominal complications (distension or bloating), Increasing spasticity (of the abdominal and chest wall)
- Drop in Peak Flow or Forced Vital Capacity (FVC) if measures available