**Alerts**

- Low saturation ≤92%, unless previously known lung disease
- Increased respiratory rate >30 breaths/minute
- Persistent/recurring morning headaches
- Aspiration
- Acute or worsening orthopnoea
- Rapid weight loss (approx. 10% or more over 3 months)
- Serum bicarbonate levels >27mmol/L

**Assessment**

All patients with a diagnosis of a neuromuscular condition should be assessed for respiratory compromise at every visit.

1. Assess for signs and symptoms of respiratory compromise.
2. Ensure all vaccinations are up to date.
3. Investigate respiratory infections.
4. Obtain baseline respiratory investigations.
5. **Ongoing review:** At every visit, or every 3–4 months:
   - Organise spirometry and cough peak flow measures and compare to baseline
   - Assess signs and symptoms of respiratory compromise
   - Examine respiratory function
   - Record patient weight
   - Assess for constipation

**Management**

1. Management should occur in line with the patient’s current advance care plan.
2. If there have been any changes in respiratory symptoms, complete respiratory investigations.
3. Manage any common respiratory issues:
   - Risk of aspiration
   - Difficulty clearing secretions
   - Increased breathlessness
   - Hypoxia or hypercapnia
   - Excessive saliva
4. Provide early antibiotics for signs of chest infection (presence of symptoms or raised white cell count) to reduce the risk of bacterial super-infection.
5. Provide information for the patient and discuss self-monitoring, self-management and end-of-life matters.
6. **Ongoing review**

**Referral**

- Refer patients with signs of acute respiratory compromise to the Emergency Department unless contraindicated in the patient’s advance care plan.
- Consider referral for specialist respiratory assessment for:
  - Assessment of respiratory muscle weakness
  - Nocturnal hyperventilation
  - Risk of aspiration or swallowing difficulties (as well as urgent referral to a speech pathologist)
  - Determination of the need for, and specific type of ventilatory support.
- Consider tele-monitoring if available in your area.

**Points to Consider**

- Low oxygen levels indicate respiratory insufficiency. However, excessive amounts of supplemental oxygen can promote carbon dioxide retention, creating negative impacts on patient outcome. If oxygen is required, aim for a target saturation of 88–92%.
- Pulse oximetry readings can vary in their accuracy due to features such as temperature, drug responses, incorrect sensor application and the condition of the skin.

**Information**

- Clinical resources
- Patient information
- References