PROCEDURE

Oxygen administration (prescribed)

Scope (Staff):	Community health
Scope (Area):	CAHS-CH

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this disclaimer

Aim

To outline the administration of prescribed oxygen for clients in the Education Support setting.

Risk

Failure to adhere to this procedure may result in inappropriate administration of oxygen and may lead to possible harm to the client.

Background.

An appropriate level of oxygen is vital to support cell respiration. The goal of oxygen delivery is to maintain targeted oxygen saturation (SpO2) levels in children and young people through the provision of supplemental oxygen in a safe and effective way¹.

Some clients will be prescribed continuous oxygen therapy, whereas others will be prescribed oxygen administration under certain circumstances as outlined in their Student Health Care Plan. Excessive or inappropriate supplemental oxygen can be harmful, and so oxygen should only be administered to achieve the target oxygen saturation levels as prescribed by a medical practitioner¹.

For more background information on respiratory diseases and supplemental oxygen therapy, refer to Child and Adolescent Health Services (CAHS - PCH) *Oxygen Administration* guideline¹.

Key points

- All nurses will refer to the <u>Nursing and Midwifery Board AHPRA Decision-making</u>
 <u>framework</u> in relation to scope of practice and delegation of care to ensure that
 decision-making is consistent, safe, person-centred and evidence-based.
- The Student health care plan must be current and will outline specific oxygen requirements for baseline and emergency management, including oxygen rate, delivery by mask or nasal prongs, and targeted oxygen saturation ranges as required.
- Community Health Nurses working in non-education support school settings who
 are asked to respond in a medical emergency must act as per the <u>School aged</u>
 <u>health services policy</u> and the <u>School aged health services Secondary guideline</u> in
 relation to a medical emergency, as well as the <u>Recognising And Responding To</u>
 Acute Deterioration policy.
- Nurses should follow safety and storage recommendations if a client's additional oxygen cylinders require storage at school^{2, 3}. Cylinders belonging to individual clients must be labelled with this client's name.
- Generic oxygen stored at the school is the responsibility of the school to maintain.
 It is not to be used by nurses for clients, unless documented in their Student Health Care Plan or in a medical emergency.
- Community health nurses must follow the organisation's overarching infection prevention and management policies and perform hand hygiene in accordance with WA Health guidelines at all appropriate stages of the procedure.

Equipment

Where a client requires oxygen therapy, the parent/caregiver is required to supply the necessary equipment which has been maintained according to the manufacturer's specifications:

- Oxygen cylinder and flow meter gauge
- Pulse oximeter
- Green or clear oxygen tubing⁴
- Hudson or other simple mask or nasal prongs (and spare mask/prongs) as specified on the Student Health Care Plan
- Adhesive tape optional

Procedure

Section A: Clients receiving continuous oxygen administration

Steps	Additional Information		
1. Arrival at school			
Check client identity.	Refer to CACH Client Identification		
Check Student health care plan for oxygen requirements.	procedure. Consent for oxygen administration is		
Check appropriate equipment has been supplied to support oxygen needs for the school day.	evidenced by a signed, current Student Health Care Plan.		
Check the oxygen indicator to ensure there is sufficient oxygen in the cylinder.	If there is insufficient oxygen in the cylinder, request the parent/caregiver		
Check oxygen can flow freely and ensure the oxygen tubing is patent.	bring a spare oxygen cylinder to school.		
2. Observe client			
Assess client's clinical status, respiratory effort, and oxygen saturation as per the Student Health Care Plan for changes indicating need to alter the oxygen flow rate ¹ .	Alterations to oxygen therapy must be undertaken to maintain oxygen saturations within the targeted ranges outlined in the Student Health Care Plan.		
Adjust oxygen flow rate as prescribed.	A black as in the table was a second		
Check mask/prongs and tubing patency regularly ¹ .	A blockage in the tube may cause an increase in respiratory effort or respiratory distress.		
Observe client's skin for signs of pressure or irritation from the oxygen mask/prongs and/or tubing.	If skin concerns or mouth or nose dryness are noted, contact the parent/caregiver to discuss care planning for this.		
Monitor client's mouth and nose for dryness ¹ .			

Section B: Clients requiring intermittent oxygen administration

Steps	Additional Information		
Arrival at school Check client identity. Check Student health care plan for oxygen requirements.	Refer to CACH <u>Client Identification</u> procedure.		

Steps	Additional Information		
Check appropriate equipment has been supplied to support potential oxygen needs for the school day.	Consent for oxygen administration is evidenced by a signed, current Student Health Care Plan.		
Check the oxygen indicator to ensure there is sufficient oxygen in the cylinder.	If there is insufficient oxygen in the cylinder, request the parent/caregiver bring a spare oxygen cylinder to school.		
2. Preparation			
Check client identity.	Oxygen therapy must be undertaken in accordance with the Student Health Care Plan.		
Assess the client's clinical status and oxygen saturation for indications of the need to commence oxygen administration.			
Assemble and connect equipment.			
Explain the procedure to client.			
3.1 Simple (Hudson) Mask	Ensure the client is comfortable. The mask should fit from the bridge of the nose to the cleft of the chin ¹ .		
Place the mask on the face.			
Adjust the nose clip and head strap to secure in place and to ensure an adequate seal over the mouth and nose.	At least 5L/min via Simple/Hudson mask is required to prevent retention of carbon dioxide ¹ .		
	Oxygen mask use is contraindicated while a client is vomiting, due to risk of aspiration ^{1, 3} .		
3.2 Nasal prongs	Nasal prongs are generally preferrable for long-term use and for low-flow oxygen ³ .		
Insert prongs into the nostrils and secure with client's tape on either side of the			
face.	Maximum flow rate via nasal prongs is 3L/min for paediatrics and 4L/min for adolescents ¹ . Nasal prongs should fill no more than 50% of the nares ² .		
Position the tubing over the ears and secure behind the client's head.			
Ensure straps and tubing are away from the patient's neck to prevent risk of airway obstruction ² .			
4. Oxygen administration			
Adjust flow to the client's prescribed rate, as stated in the Student Health Care Plan.	Titrate oxygen therapy to maintain oxygen saturations within the targeted ranges ¹ as outlined in the Student Health Care Plan.		

Steps	Additional Information		
Check oxygen continues to flow freely and ensure the oxygen tubing is patent. Check prongs / tubing regularly for patency, kinks or twists ^{1, 2} .	A blockage in the tube may manifest as an increase in respiratory effort or respiratory distress. Replace nasal prongs if they become blocked with secretions.		
5. Assessment Assess the client as per Student Health Care Plan. Observe client's face, behind their ears and back of head for signs of pressure or irritation from the mask/nasal prongs. Monitor client's mouth and nose for dryness ¹ .	Respiratory observations include the client's colour, respiratory rate and effort, and oxygen saturation as per Student health care plan. Contact parent/caregiver if there are significant changes to the client's health status or current management. Consider suggesting a medical review if client required significant or unexpected increase in oxygen therapy ¹ .		
6. In an emergency situation Call for an ambulance if client has not positively responded to the administration of prescribed oxygen as outlined in the Student Health Care Plan. In an emergency situation, verbal clinical handover should occur with the paramedic to ensure all critical information is communicated, following the iSoBAR format as per the Communicating for Safety policy, and the Recognising and Responding to Acute Deterioration policy.	Inform the principal and parent/caregiver as soon as practical after an ambulance is called.		
7. Documentation Document events, decisions, actions, outcomes, and communications accurately in client record.	Record changes in client's health status, clearly noting the clinical indicators requiring intermittent or increased oxygen use.		

Compliance monitoring

Failure to comply with this policy document may constitute a breach of the WA Health Code of Conduct (Code). The Code is part of the *Integrity Policy Framework* issued pursuant to section 26 the *Health Services Act 2016* (WA) and is binding on all CAHS staff as per section 27 of the same act.

Compliance monitoring methods may include observation of clinical practice, clinical incident review, client health record documentation audit and/or attendance at identified training sessions.

References

- 1. Perth Children's Hospital. Oxygen administration. Clinical Practice Manual. Perth: Child and Adolescent Health Service; 2021.
- 2. The Royal Children's Hospital Melbourne. Oxygen delivery. Clinical Guidelines (Nursing). Melbourne: The Royal Children's Hospital Melbourne; 2017.
- 3. Balfour-Lynn IM, Field DJ, Gringras P, Hicks B, Jardine E, Jones RC, et al. BTS guidelines for home oxygen in children. Thorax. 2009;64.
- 4. Perth Children's Hospital. Oxygen and Suction Equipment Maintenance. Perth: Child and Adolescent Health Service; 2023.

Related internal policies, procedures and guidelines

The following documents can be accessed in the CH Clinical Nursing Manual: HealthPoint link or Internet link

Clinical Handover - Nursing

Student health care plans

The following documents can be accessed in the <u>CAHS-CH Operational Policy</u> Manual

Client Identification

Recognising and Responding to Acute Deterioration

The following documents can be accessed in the CAHS Policy Manual

Clinical Documentation

Hand Hygiene

Standard and Transmission Based Precautions

Related external legislation, policies, and guidelines

Clinical Handover Policy (MP0095)

Clinical Incident Management Policy (MP 0122/19)

Oxygen Delivery (Royal Children's Hospital Melbourne)

Recognising and Responding to Acute Deterioration Policy (MP 0171/22)

Related internal forms

Accessed via CAHS-Community Health Forms and Resources on HealthPoint

Clinical Handover/Referral Form (CHS663)

Clinical Handover/Referral Form – Electronic (CHS663E)

Clinical Handover/Referral Form envelope (CHS663-1)

Community Health Progress Notes (CHS800C)

Related internal resources

Nurses working in Community Health Practice Framework

Memorandum of Understanding between DOE, CAHS and WACHS for the provision of school health services 2022-2024

Related external resources (including related forms)

DOE Student Health Care

This document can be made available in alternative formats on request.

Document Owner:	Nurse Director, Community Health		
Reviewer / Team:	Clinical Nursing Policy Team		
Date First Issued:	2007	Last Reviewed:	26 October 2023
Amendment Dates:		Next Review Date:	26 October 2026
Approved by:	Community Health Nursing Leadership Group	Date:	26 October 2023
Endorsed by:	Executive Director - Community Health	Date:	26 October 2023
Standards Applicable:	NSQHS Standards:		

Printed or personally saved electronic copies of this document are considered uncontrolled



Respect