

Title:	Paediatric Drowning		
Version:	2		
Supersedes:	Paediatric Drowning Version 1		
Application:	The guideline is intended for use by any hospital team caring for infants, children and young people under 16 years age across the Paediatric Critical Care Network in the North-West (England) & North Wales region.		
Originated /Modified By: Designation:	Originated By: North-West (England) & North Wales Paediatric Transport Service (NWTS) & North-west (England) and North Wales Paediatric Critical Care Network Version 1: Srinivasan Palaniappan, Paediatric intensive care and NWTS Fellow RMCH Kate Parkins, PICM Consultant, NWTS Version 2: Jordan Robbery, PICM grid trainee RMCH/AHCH Srinivasan Palaniappan, PICM Consultant, NWTS		
Changes made:	New algorithm designed		
Reviewed by:	1. North-West (England) & North Wales Paediatric Critical Care Operational Delivery Network (ODN) 2. Lewis Nicholls, Paediatric Pharmacist, PCC ODN & RMCH		
Ratified by:	1. North-West (England) & North Wales Paediatric Critical Care ODN 2. RMCH (Host Trust): Paediatric Policies & Guidelines & Pharmacy & Medicines Management Committees		
Date of Ratification:	1. PCC Oversight: Date 2. PMMC: Date 3. P&G Committee:		
Issue / Circulation Date:		21.11.2025	
Circulated by:		PCC, SiC & LTV ODN	
Dissemination and Implementation:			
Date placed on the websites (NWTS / PCC, SiC & LTV ODN) + MFT intranet		21.11.2025	
Planned Review Date:		November 2028	
Responsibility of:		Clinical lead North-West (England) & North Wales Paediatric Critical Care ODN & NWTS guideline team	
Minor amendment (if applicable) notified to:			
Date notified:			
EqIA Registration Number:		EQIA 2025-350	

1. Details of Procedural Document

Paediatric Drowning

2. Equality Impact Assessment

Please record the decision whether the policy, service change or other key decision was assessed as relevant to the equality duty to:

- Eliminate discrimination and eliminate harassment
- Advance equality of opportunity
- Advance good relations and attitudes between people

No concerns raised

EqlA registration Number for RMCH:	2025-350
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3. Consultation, Approval and ratification Process

This guideline was developed with input from:

- North-West (England) and North Wales Paediatric Transport Service (NWTS).
- North-West (England) and North Wales Paediatric Critical Care Operational Delivery Network
- Representatives from the Local Hospital Teams within network above.

These guidelines were circulated amongst the North-West (England) and North Wales Paediatric Critical Care Operational Delivery Network and North-West (England) & North Wales Children's Major Trauma Network for comments in July 2025

All comments received have been reviewed and appropriate amendments incorporated.

These guidelines were signed off by the PCC ODN guidelines committee on **Date**.

For ratification process for network guidelines see appendix 1.

4. Disclaimer

These clinical guidelines represent the views of the North-West (England) and North Wales Paediatric Transport Service (NWTS) and the North-West (England) and North Wales Paediatric Critical Care Operational Delivery Network (PCC ODN). They have been produced after careful consideration of available evidence in conjunction with clinical expertise and experience.

It is intended that trusts within the Network will adopt this guideline and educational resource after review and ratification (including equality impact assessment) through their own clinical governance structures.

The guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient.

Clinical advice is always available from NWTS on a case-by-case basis.

Please feel free to **contact NWTS (01925 853 550)** regarding these documents if there are any queries.

STOP & ASSESS:

C-SPINE IMMOBILISATION: MILS / AIRWAY / BREATHING / CIRCULATION / GCS + PUPILS
RESUSCITATE as per APLS & TRIGGER 2222 call if not already (+/- trauma call if appropriate)
REMOVE ALL WET CLOTHING ASAP & DRY

C-Spine injury only seen in 0.5% drowning patients. MILS & only CT IF risk C-spine injury based on mechanism

Insert oesophageal temperature probe

- Temp < 30°C: max 3x DC shocks if shockable rhythm seen on ECG. Do NOT give any resuscitation drugs.
 - Once Temp > 30°C resume DC shocks
- Temp 30-35°C: 2x time interval between resuscitation DRUG doses until temp ≥ 35 °C
- **When applying defib pads: ALWAYS check contact area is DRY**
- **Before giving DC shock: CHECK no-one in contact with pt or stood in pool water on floor**

URGENT INVESTIGATIONS

- Blood gas + glucose + lactate; Blood for FBC, U&E, LFT, coagulation + CK
- Send urine for toxicology & blood for alcohol + paracetamol/salicylate screen
- 12 lead ECG: check for arrhythmia, long QT. NB Amiodarone contraindicated in long QT
- Chest X-ray

During resuscitation, consider context of scenario where patient found if hypothermic & reviewing if prolonged resus appropriate. D/W Paeds / Anaes / EM teams present see page 5

D/W NWTS: ideally complete NWTS referral form before making the call

AIRWAY:

TRIGGERS FOR INTUBATION ([Intubation guideline](#))

- Unable to maintain airway
- SpO₂ < 92% in 15 L/min O₂ OR HFHO₂ @ 2L/kg/min
- GCS ≤ 8 or variable or agitated/encephalopathic
- Use cuffed ET tube (if ≥ 3 kg)
- Place NG/OG tube: high risk aspiration & distended stomach may splint diaphragm worsening pCO₂ clearance

BREATHING

LUNG-PROTECTIVE VENTILATION TARGETS

- Permissive hypoxia: aim SpO₂ 88-92%¹⁴
- Avoid hypercapnia (see neuroprotection)
- PEEP 10-15, titrate as needed for oxygenation
- Tidal volume 5-8 mL/kg MAX 10 mL/kg
- Max Peak Pressure 30 cmH₂O (if target SpO₂ achieved)
- May need airway clearance manoeuvres

CIRCULATION

- Monitoring: ECG & BP (↑ risk arrhythmia)
- Consider IV Mg to treat arrhythmia
- IO / PVL access +/- arterial line
- Correct hypovolaemia
- Restrict maintenance fluid to 70%
- Consider early vasoactive support
- Target age-appropriate MAP & CPP pg 8
- [Shock guideline](#)

NEUROPROTECTION post intubation & ventilation

- 15-30° head up tilt, no collar
- Hypoxic brain injury: ET pCO₂ 4.5-5 kPa; SpO₂ ≥ 94%
- Target Na 145-150 mmol/L to ↓ risk coning
- Give 2.7% sodium chloride 2-5mL/kg over 20 mins if concerns ↑ ICP
- Sedation: morphine & midazolam + rocuronium infusion
- Actively warm to 32°C: aim normothermia
- Normoglycaemia ie glucose ≥ 3 mmol/L
- Seizure prophylaxis: levetiracetam 40mg/kg MAX 3 g
- CT Scan post ROSC when stable

EVERYTHING ELSE

Safeguarding – see page 4

Don't forget to maintain blood glucose ≥ 3 mmol/L

Warming – see page 6

POOR PROGNOSTIC FACTORS

Age < 3 yrs	Asystole at scene
Submersion > 5 mins	Resus attempt > 30 mins
No CPR > 10 mins	

NO EVIDENCE FOR:

Routine antimicrobials
Use of corticosteroids
Cooling post ROSC

HISTORY AND ASSESSMENT

Investigate the circumstances leading to drowning & ALWAYS consider safeguarding referral:

- Check for any inconsistencies in history
- Specific triggers for safeguarding referral include:
 - All who have had an Out of Hospital Cardiac Arrest (OOHCA)
 - Check history is compatible with developmental stage of patient
 - At home eg bathtub events, may be associated with neglect & maltreatment
 - Any issues around safety or supervision
 - Any concerns re associated drug or alcohol ingestion
 - Any concerns re mental health specifically suicidal ideation
- Trigger urgent multi-agency safeguarding review (if not already triggered).
- Check police have been informed (so scene of incident can be investigated)

Consider a medical cause for drowning

- Seizures
- Arrhythmias and Long QT
- Intoxication (drug or alcohol)

Timeline – clarify and document

- Immersion time
- Time to and type of basic life support delivered
- Document if apnoea +/- asystole noted
- Time to first respiratory effort
- Time of return of spontaneous circulation (ROSC) if relevant
- Details of treatment / resuscitation required

Examination:

- Rapid primary survey including immediate management of any concerns with airway, breathing, circulation, disability & everything else (ABCDE)
- Complete a secondary survey to assess for other injuries including evidence of non-accidental injury.
- Measure core temperature with an oesophageal temperature probe or rectal thermometer (preferably oesophageal if continuous monitoring required).
- Avoid hypothermia or prevent worsening hypothermia by limiting exposure.

All patients with a history of drowning should be observed within a hospital setting for a minimum of 6 hours due to potential risk of respiratory deterioration.

INVESTIGATIONS

Should be guided by the child's history and clinical condition

NB Reduced GCS is not always secondary to drowning (especially in the absence of significant hypoxia) - exclude other causes⁸ e.g. hypothermia, traumatic brain injury, hypoglycaemia, drug or alcohol ingestion and co-existent medical condition.

- Blood gas including lactate, ionised calcium and glucose
- FBC and coagulation
- Biochemistry: U&E's, bone profile, magnesium, LFT's, C-reactive protein, Creatine Kinase and Serum osmolality
- Correct any electrolyte abnormalities found
- CK may be increased if child has struggled in hypoxic conditions. Dipstick urine (may reveal false positive haemoglobin as detecting myoglobin), and send for myoglobin (may not be available urgently)
- Consider sending drug (urine) and alcohol (blood) screen.
- Chest x-ray: any changes take time to appear, and findings do not always correlate with clinical outcome
- CT scan/MRI brain if reduced GCS or concerns regarding head injury
- Blood and endotracheal aspirate culture (fever is common during the first 24 hours but is not necessarily a sign of infection)

RESUSCITATION & STABILISATION POST-ROSC

- **CARDIAC ARREST** management as per APLS guidelines see algorithm page 7
- **MODIFY if hypothermic:** resuscitation drugs: **↑ dose time interval to every 8 mins once temp $\geq 30^{\circ}\text{C}$**
- Early, effective basic life support (BLS) \downarrow mortality & morbidity. It is most important factor for survival.
- If a defibrillator is used it is essential to dry the chest before applying the electrodes
- Record central/core temperature (oesophageal or rectal)
 - < **30°C** : aggressively rewarm, avoid adrenaline or amiodarone and maximum 3 defibrillation attempts (if shockable rhythm)
 - Resume defibrillation attempts once core temp $> 30^{\circ}\text{C}$
 - $30-35^{\circ}\text{C}$** : Defibrillate as usual (if shockable rhythm); Dose interval for drugs increased to 8 minutes

Decision-making around prolonged resuscitation should be made in context of scenario patient found eg if it is a warm day and the child hasn't been seen for some time, then hypothermia is unlikely to be a reversible cause for the cardiac arrest associated with drowning. A discussion should be undertaken by the multi-disciplinary team present as to whether a prolonged resuscitation attempt is appropriate.

SYSTEMS-BASED GUIDANCE

C-SPINE INJURY & Manual In-Line Stabilisation (MILS)

Less than 0.5% of drowning patients sustain a c-spine injury therefore in the absence of history of potential mechanism that may cause c-spine injury, c-spine immobilisation (MILS) and/or imaging is not required.

AIRWAY

NWTS intubation guideline

<https://www.nwts.nhs.uk/clinicalguidelines/regionalguidelines-a-z>

- Patients should be intubated with a cuffed endotracheal tube (ETT) if weigh 3 or more kg.
- NB Stomach may contain a large amount of ingested water, increasing the risk of aspiration or airway soiling during intubation. Therefore, intubate to protect the airway of those with reduced GCS
- Consider aspirating the stomach prior to intubation or bag-mask ventilation.
- ALWAYS place a gastric tube to decompress stomach ASAP after intubation if not feasible before.

BREATHING

- Aim to correct hypoxaemia using high flow humidified oxygen (HFHO_2) or non-invasive (NIV) CPAP
- Consider early intubation and ventilation for those who fail to stabilise on HFHO_2 or NIV CPAP or have a low GCS or prolonged cardiac/respiratory arrest
- Aspiration of small amounts of fluid inactivates surfactant and impairs gas exchange. Aspirated water can also cause direct lung injury resulting in ARDS (acute respiratory distress syndrome)
- Respiratory deterioration can be delayed for 4–6 hours after submersion and even children who have initially apparently recovered should be observed for at least 6 hours.
- Chest X-ray changes vary from normal to localised, perihilar, or diffuse pulmonary oedema Bronchospasm is often seen, and most will rapidly improve with nebulised salbutamol (see [asthma guidelines](#))

VENTILATION TARGETS depend on the presence of hypoxic brain injury.

- **For hypoxic brain injury** (or suspected):
Aim for $\text{SpO}_2 > 94\%$ pCO_2 4.5-5 kPa.
- **If no hypoxic brain injury** (intubated patient):
Aim for $\text{SpO}_2 > 88-92\%$
Permissive hypercapnia: accept $\text{pH} \geq 7.15$ -7.30 and $\text{PaCO}_2 < 9$ kPa (option to \downarrow barotrauma)
- Ventilation is expected to worsen over the first 24 hours due to aspiration-induced inflammation, pulmonary oedema, and reduced lung compliance.
- Bronchospasm is common and usually responds to nebulised salbutamol.
- Research has been unable to determine effects of water salinity on outcome⁷.
- There is no evidence of benefit from administration of surfactant or corticosteroids¹⁰.

RESUSCITATION & STABILISATION POST-ROSC (continued)

CIRCULATION

- Pulses may be difficult to detect in hypothermic patients, potentially delaying recognition of cardiac arrest (always auscultate chest checking for heart sounds)
- Closely monitor ECG, End-Tidal CO₂ (ET CO₂) and arterial line traces; if there is any doubt, start CPR.
- Myocardial hypoxia can lead to arrhythmias and cardiogenic shock.
- Insert intra-osseous access if patient is in extremis or difficulty/delay in establishing intravenous access. When more stable consider central venous and arterial access.
- Maintain age-appropriate blood pressure and cerebral perfusion pressure (for those at risk of raised intracranial pressure (ICP)). **See appendix page 8**
- May require fluid bolus, inotropes and/or vasopressor support
- If inotropic support is needed, administer via an intraosseous (IO) or central line, as it may accumulate in peripheral circulation in hypothermic patients if given via PVL.
- **See shock guidelines (<https://www.nwts.nhs.uk/clinicalguidelines/regionalguidelines-a-z>)**
- Metabolic acidosis is secondary to hypoxia; sodium bicarbonate is not recommended⁸.

NEUROLOGY

- Brain is most vulnerable organ for asphyxia/hypoxia.
- Cerebral impairment occurs before cardiac problems in drowning.
- Treatment goal is prevention further secondary brain injury by instigating neuroprotective measures¹³.
 - Aim for SpO₂ >94%; pCO₂ 4.5-5 kPa
 - 15-30° head up tilt, no collar
 - Target Na 145-150 mmol/L to ↓ risk cerebral oedema & coning
 - Normoglycaemia ie glucose ≥ 3 mmol/L
 - Seizure prophylaxis: levetiracetam 40mg/kg MAX 3 g
- Give 2.7% sodium chloride 2-5mL/kg over 20 mins if concerns raised intracranial pressure (ICP)
- **NB Reduced GCS is not always due to drowning**
 - Exclude other causes¹³: drug or alcohol ingestion, intracranial bleed or head injury
 - Send urine for toxicology & blood for paracetamol/salicylate & alcohol levels
 - Urgent CT scan head once stable

HYPOTHERMIA AND REWARMING

Re-warming strategy depends on whether the patient is haemodynamically stable or not.

If haemodynamically stable: aim to increase core temperature by 0.5°C every hour up to 35 degrees³.

- Heated humidified ventilator gases
- Use warmed IV fluids (38-40 °C)
- Warming blankets and radiant heaters

If haemodynamically unstable rewarm aggressively using³ all above AND:

- Bladder irrigation with warmed saline (42°C): use 5mL/kg, instil for 1 minute, drain and repeat.
- Haemofiltration
- ECMO (extra-corporeal membrane oxygenation) if available (only at Alder Hey Children's Hospital (under 16 years) or possibly Wythenshawe Hospital (adolescents only))

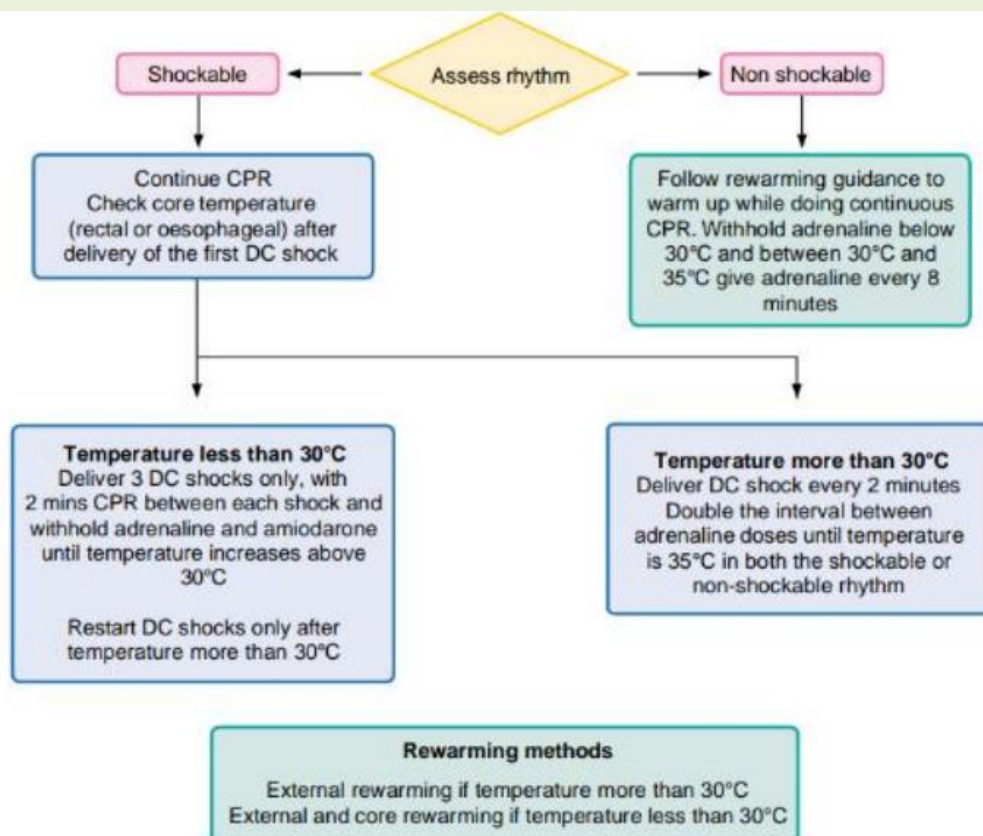
Resuscitation should be continued until the core temperature is higher than 32°C³.

Therapeutic hypothermia after cardiac arrest is NOT recommended¹¹.

SUPPORTIVE THERAPY

- No evidence that starting antibiotics routinely improves outcome⁸ – send BAL and treat if any concerns.
- Multi organ dysfunction is common in paediatric drowning victims who require PICU (54%).
- Maintain normothermia following return of spontaneous circulation (ROSC) post cardiac arrest ie maintain temperature between 36-37.5°C³. No evidence that cooling improves outcome.
- No evidence for the use of corticosteroids, phenobarbitone, calcium channel blockers.
- Inhaled nitric oxide may be indicated and may be started by NWTS team or after transfer to PICU (see PICU guideline for use of iNO). Pulmonary bleeding is a relative contraindication¹².

Appendix 1 – Resuscitation of the hypothermic child. (3)



External rewarming	Core rewarming
<ul style="list-style-type: none"> Remove cold, wet clothing Supply warm blankets Warm air system Heating blanket Infrared radiant lamp 	<ul style="list-style-type: none"> Warm IV fluids to 39°C Warm ventilator gases to 42°C Gastric/bladder lavage with saline at 42°C Peritoneal lavage with potassium-free dialysate at 42°C, 20 ml/kg with a 15 minute cycle Pleural or pericardial lavage Endovascular warming ECMO (extracorporeal blood rewarming)
Temperature to rise by 0.25–0.5°C per hour to reduce haemodynamic instability Aim for normothermia of 35–37°C	
If drowning: core temperature of less than 33°C and water temperature of less than 6°C increases chance of survival	
Resuscitate until core temperature is 32°C or cannot be raised despite resuscitation and active rewarming (Clinical decision to stop can be made despite inability to raise temperature to 32°C)	

Reproduced from Advanced Paediatric Life Support: A Practical Approach to Emergencies, 7th Edition, first published 2023 © 2023 John Wiley & Sons Ltd.

This algorithm is to be used for educational purposes only and must not be shared with third parties.

ALSQ is a medical education charity aiming to improve outcomes for people in life-threatening situations, anywhere along the healthcare pathway. www.alsq.org

RESOURCES: Quick reference guide for National PEWS

TARGETS for managing any critically sick child

ALL AGES	SpO₂ ≥ 94%	Lactate ≤ 2 mmol/L	Glucose: ≥ 3 mmol/L
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CAUTION inaccurate pulse oximetry (SpO₂) readings can occur in severe anaemia, high carbon monoxide levels and hypoperfusion. IN ADDITION, SpO₂ may inaccurately over-read in all races, especially those with darker skin pigmentation, masking occult or unrecognised hypoxaemia, i.e. ARTERIAL oxygen < 88% vs SpO₂ ≥ 92%. Occult hypoxaemia was >3xs greater in Black vs White patients and may over-estimate SpO₂ between 1.5-5%.

AGE	TARGET MEAN BP	AGE	TARGET MEAN BP
0-11 Months	45-55	5-12 Years	60
1-4 Years	55-60	>13 Years	60-65

Respiratory Rate (Score up to 4)

Score	4	2	1	0	1	2	4
0-11 months	0-10	11-20	21-20	31-49	50-59	60-69	≥70
1-4 years	0-10	11-20		21-39	40-49	50-59	≥ 60
5-12 years	0-10	11-15	16-20	21-24	25-39	40-49	≥ 50
>13 years	0-10		11-15	16-24	25-29	30-39	≥ 40

All Ages Score	Respiratory Distress (Score up to 4)
0 = none	None
1 = mild	Nasal flaring, subcostal recession
2 = moderate	Tracheal tug, intercostal recession, inspiratory or expiratory noises
4 = severe	Supraclavicular recession, grunting, exhaustion, impending respiratory arrest

All Ages Score	Oxygen Saturations (Score up to 4)
0	95-100%
2	92-94%
4	≤ 91%

All Ages Score	Oxygen Requirement (Score up to 4) - ALL AGES
0	Room Air
2	0.01 up to 4 litres/min
4	4 or more litres/min NB High flow humidified NC oxygen, NIV CPAP or BiPAP score 4 (irrespective of O ₂ requirement)

Heart Rate (Score up to 4)

Score	4	2	1	0	1	2	4
0-11 Months	0-80	81-90	91-110	111-149	150-169	170-179	≥ 180
1-4 Years	0-60	61-70	71-90	91-139	140-149	150-169	≥ 170
5-12 Years	0-60	61-70	71-80	80-119	120-139	140-159	≥ 160
>13 Years	0-50	51-60	61-70	71-99	100-119	120-129	≥ 130

Blood Pressure Systolic (Score up to 4)

Score	4	2	1	0	1	2	4
0-11 Months	0-50	51-60	61-70	71-89	90-99	100-109	≥ 110
1-4 Years	0-50	51-60	61-80	81-99	100-119	120-129	≥ 130
5-12 Years	0-70	71-80	81-90	91-109	110-119	120-129	≥ 130
>13 Years	0-80	81-90	91-100	101-119	120-129	130-139	≥ 140

Capillary Refill Time (CRT) (Score up to 2)

Score	4	2	1	0	1	2	4
All Ages		≥ 3 secs		<3 secs		≥ 3	

Check if your patient has any additional Risk Factors (NPEWS)

Risk Factors	Tick	Think!
Baseline vital signs outside normal reference ranges		Always score relevant PEWS value even if this is normal for the patient eg cyanotic heart disease
Tracheostomy / Airway Risk / Difficult Intubation		Do you need additional help in an airway emergency? Needs review by local anaesthetics & ENT teams. Consider d/w NWTS early
Invasive/Non-invasive ventilation/high flow		Check oxygen requirement on additional respiratory support. Remember High Flow/BiPAP & CPAP score max 4 on oxygen delivery
Neutropenic/immunocompromised		Sepsis recognition & escalation has a lower threshold
<40 weeks corrected gestational age		Sepsis recognition & escalation has a lower threshold (beware hypothermia)
Neurological condition (ie meningitis, seizures)		Remember: check pupil response if anything other than ALERT on AVPU
Neurodiversity or Learning Disability		Be aware of the range of responses to pain & physiological changes

NPEWS Escalation	Actions	Medical Review	Observation / Plan
E0 – no concerns Score = 0	None	Not required	Continue current observations
E1 – Increased monitoring Score = 1- 4	Inform Nurse-in-Charge Consider medical review (ST3+ or equivalent) Ensure feedback to parents	As required Discuss with Nurse-in-Charge whether medical review required	Reassess within 60 mins & document ongoing plan
E2 – Needs clinical review (within 30 mins) Score = 5-8	Review by Nurse-in-Charge Ensure feedback to parents	Within 30 mins Review by ST3+ or equivalent Discuss stabilisation plan with consultant	Reassess within 30 mins & document ongoing plan Continuous SpO ₂ monitoring
E3 – Needs rapid review (within 15 mins) Score = 9-12	Immediate review by Nurse-in-charge Discuss medical plan with consultant Senior feedback to parents	Within 15 mins Alert to ST3+ or equivalent Stabilisation plan to be agreed after review by consultant Consider NWTS referral after consultant review	Reassess every 30 mins Continuous monitoring SpO ₂ , RR, & ECG Record full GCS if change in AVPU
E4 – Needs emergency review (immediate) Score > 12	Immediate review by Nurse-in-Charge Consider immediate 2222 call for immediate emergency medical response Inform paedics consultant Senior feedback to parents	Immediate Alert to ST3+ or equivalent Consultant review ASAP Anaesthetic review Consider NWTS referral after appropriate initial interventions	Reassess every 15 mins Continuous SpO ₂ , ECG, & RR Record full GCS if change in AVPU

NB Escalation levels can also be selected and triggered if parent or carer expresses concern that their child needs increased monitoring +/- clinical review despite PEWS, OR parent or nursing gut instinct irrespective of score.

Medical Plan for Stabilisation:

Structured plan must be documented including:

1. Specific actions to be taken
2. Expected outcome
3. Outcome deadline / in timeframe
4. Escalation if outcome not met by deadline / in timeframe

Resources

For Drug Doses:

British National Formulary for Children

Emergency Drug Guide via NWTS website home page - for intubation drugs / sedation regime / inotropes
<https://www.nwts.nhs.uk/emergency-drug-guides>

Emergency Drug Guide (wt based) via NWTS website home page - for intubation drugs / sedation regime / inotropes

<https://www.nwts.nhs.uk/emergency-drug-guides>

Guidelines for <16 years: <https://www.nwts.nhs.uk/clinicalguidelines/regionalguidelines-a-z>

STOPP tool: Safe Transfer of Pediatric Patients which includes risk assessment prior to transfer, and checklists

NWTS LocSIPPS: includes sizes of ETT, suction, NGT, CVL & arterial lines and checklist for paediatric intubation

Guidelines include: intubation and difficult airway, sepsis including inotropes, insertion of intraosseous needle, collapsed neonate or infant, management of under 16 years outside PCC level 3 unit, and transfer

Education: www.nwts.nhs.uk/education-website

Includes recordings of NWTS education eg time critical transfers, sepsis, airway management etc

Login details for NWTS education site are available from your nursing, AHP and medical paediatric critical care operational delivery network links

OR via email: info@nwts.nhs.uk

CONTACT NUMBERS:

NWTS (North-West (England) & North Wales Paediatric Transport Service): Referrals 08000 84 83 82

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Date of Review: November 2028

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For the most up to date version of this guideline please visit PCC / SiC / LTV

<https://northwestchildrensodnhub.nhs.uk>

Or NWTS website: <https://www.nwts.nhs.uk/clinicalguidelines/regionalguidelines-a-z>

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Paediatric Drowning

Ratification Process

