



# Portage County EMS Patient Care Guidelines



## Submersion

### Notes:

- RESCUER SAFETY IS #1. Many well-intentioned volunteer and professional rescuers have been injured or killed attempting to save a drowning victim.
- If the victim is still in the water dispatch local water rescue resources
- Submersion is a loss of consciousness under water
- Submersion incidents commonly have delayed onset signs and symptoms. Strongly encourage patients to be transported to a hospital for evaluation.

<b>Priorities</b>	<b>Assessment Findings</b>
Chief Complaint	"Drowning", "Near Drowning"
LOPQRST	Onset. Duration of time under water. Water temperature, if known. Bystander CPR performed? AED Used?
AS/PN	Alcohol involved? Trauma involved?
AMPL	Allergies? Medications?
Initial Exam	Check ABCs and correct immediately life-threatening problems.
Detailed Focused Exam	<b>Vital Signs:</b> BP, HR, RR, Temp, SpO <sub>2</sub> General Appearance: lifeless Skin: pale, cool, mottled Lungs: wet or clear? Heart: Rate and regularity? Absent heart sounds? Neuro: Unresponsive?
Data	Blood sugar, cardiac monitor, SpO <sub>2</sub> .
Goals of Therapy	Return of spontaneous circulation (ROSC)
Monitoring	BP, HR, RR, cardiac monitoring, SpO <sub>2</sub> .

### EMERGENCY MEDICAL RESPONDER

- Routine C-spine stabilization of all submersion patients is not indicated.
- When a mechanism of injury (e.g. diving accidents), or obvious signs of trauma, is present:
  - C-spine stabilization is indicated.
  - Open the airway with a jaw-thrust maneuver.
  - Ventilate the patient while maintaining C-spine stabilization.
  - Remove the patient from the water on a long-spine board.
- Always assume that hypothermia is present and follow the *Hypothermia and Frostbite Guidelines*.
- Administer oxygen 2 – 4 LPM per nasal cannula if SpO<sub>2</sub> < 94%. Increase flow and consider non-rebreather mask to keep SpO<sub>2</sub> > 94%
- Do NOT start CPR if the patient has been submerged for more than 1 hour

*Give a status report to the ambulance crew by radio ASAP.*

### EMERGENCY MEDICAL TECHNICIAN

- Consider CPAP for respiratory distress

*Give a status report to the ambulance crew by radio ASAP.*

**ADVANCED EMERGENCY MEDICAL TECHNICIAN**

- IV normal saline @ KVO
- If hypotensive initiate a normal saline bolus of 500 ml

*Contact Medical Control for the following:*

- Additional orders

**INTERMEDIATE/ PARAMEDIC**

- Consider endotracheal intubation

*Contact Medical Control for the following:*

- Additional orders

Date of Origin: 3/25/14	Medical Director Approval:12/18/2016
Date of This Revision: 11/1/2016	Electronically Signed
State of Wisconsin Approval 03/20/2016	M. Sarah Brandt, MD
Date of Review: 11/1/2016	