Burn Resuscitation Guidelines for Alaska Providers
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Drawing in large part from, and with credit to, all those who developed:
PREHOSPITAL TRAUMA GUIDELINES FOR EMTs IN ALASKA (Burns)
Section of Injury Prevention and EMS
Division of Public Health
Department of Health and Social Services
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Other references included at end of document

SECTION 1: PREHOSPITAL OR INITIAL BURN CARE

Effective treatment of patients with serious burns must be started as soon as possible after injury, as these patients frequently require specialized care which includes airway evaluation, fluid resuscitation, pain management, and wound care.

The goal is to transfer the patient to a facility capable of providing the necessary level of care for that individual[1]. Because of long transport times and weather delays, individuals providing initial care must be familiar with the care of a major burn injury for the first 24 – 48 hours. In general, follow care guidelines for a trauma patient, with noted modifications included below. For immediate care, burn injured patients should be triaged to nearest available trauma center for stabilization and transfer as appropriate. A contact list is provided in Appendix 4.

Harborview Medical Center is the closest American Burn Association-verified Regional Burn Center for Alaska. In addition, the Level Two Trauma Center at Alaska Native Medical Center has a burn surgeon and the many ancillary services required to provide quality definitive care for small and moderate size burns. The collaboration between these two centers has permitted some burn injuries to receive care in Alaska.

Burns that require specialized care in a recognized burn center or unit include:[2,3]

- *Partial-thickness and full-thickness burns of greater than 10% total body surface area (TBSA) in patients <10 years of age or >50 years of age.*
- *Partial-thickness and full-thickness burns of greater than 20% TBSA in all other patients.*
- *Partial-thickness and full-thickness burns involving the face, eyes, ears, hands, feet, major joints, genitalia, or perineum.*
- *Full-thickness burns totaling 5% TBSA or more in any age group.*
- *Electrical burns including lightning injury.*
- *Significant chemical burns.*
- *All burns associated with inhalation injury.*
- *Circumferential burns of the chest, neck, or extremities.*
- *Burns associated with concomitant major trauma.*
- *Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.*
- *Burn injury in patients who will require special social and emotional or long-term rehabilitative support, including cases involving suspected non-accidental trauma or neglect in children or elders.*

Injury-specific BLS considerations:

1. If hazardous materials are involved, contact an appropriate agency before approaching the patient. Take care to protect yourself from chemicals or electric current.

2. Stop the burning process. If on scene quickly after the burn occurred, cooling affected parts (e.g. with tap water irrigation) may limit the depth and extent of the burn. Water irrigation beyond the immediate treatment window may reduce injury depth and is an option. Note that with burns from tar, asphalt, paraffin or oils that retain heat (or when melted fabric adheres to skin) cooling may help for a longer period of time.

3. If cooling for pain relief, do not cool or moisten more than 10% of the TBSA at any one time or for greater than 15 minutes. This can cause hypothermia.

4. Remove all clothing and jewelry in the area of the burn and distal to the injury.

5. When treating patients with chemical burns, it is imperative to ensure rescuer safety. Patients contaminated with chemicals should have their clothing removed. Do NOT transport patients prior to appropriate decontamination. Notify the receiving facility of a patient with chemical exposure to allow adequate time for preparation. All chemical burns should be flushed with copious amounts of water.
   - Brush dry chemicals off the skin before flushing.
   - For chemical burns of the eye, flush the eye immediately with <u>at least</u> one liter of normal saline or water (at least 10 to 20 minutes is preferred). More irrigation may be beneficial, especially if the chemical is alkaline.
   - If possible and available, bring the material safety data sheet (MSDS/ SDS) to the receiving facility (should be available at all businesses using hazardous chemicals).

6. Provide oxygen as needed. Administer high flow, 100% concentration oxygen by non-rebreather mask for potential inhalation injury, carbon monoxide toxicity, or other toxic inhalation. Oxygen saturation readings may be normal despite lower 0_2 carrying capacity related to the toxin (the device reads that "something" is attached to hemoglobin, not necessarily oxygen).

7. Assess circulation, motor function and sensation. Circumferential burns of extremities can interfere with perfusion of that extremity. Elevate burned extremities above the heart when possible to limit swelling.

8. Other injuries may co-exist with burns. Use spinal motion restriction if spine injury is suspected. Splinting interventions need to be constantly reassessed to assure that the swelling inherent to burn pathophysiology does not create a constrictive environment within the splint.

9. Consider ALS intercept for patients with serious burns, any burn with inhalation injury, and/or electrical injuries. High voltage electrical injuries may pose a risk for cardiac dysrhythmias.

10. Estimate the total body surface area (TBSA) involved. Describe the body surface area as well as the depth of burn (e.g. 20% partial thickness burn, and 15% full thickness burn). Do not include superficial burn area to TBSA. The "Rule of Nines" provides a rough estimate of TBSA involved, but more precise tools are available.* When measuring TBSA, an alternate method is to use the patient's palm (from wrist crease to fingertips), which equals 1% of the body surface area. This serves as a quick method. In children, be sure to use the child's palm and not your own.
**See also Appendix 1: Alaska Native Medical Center Initial Burn Chart*

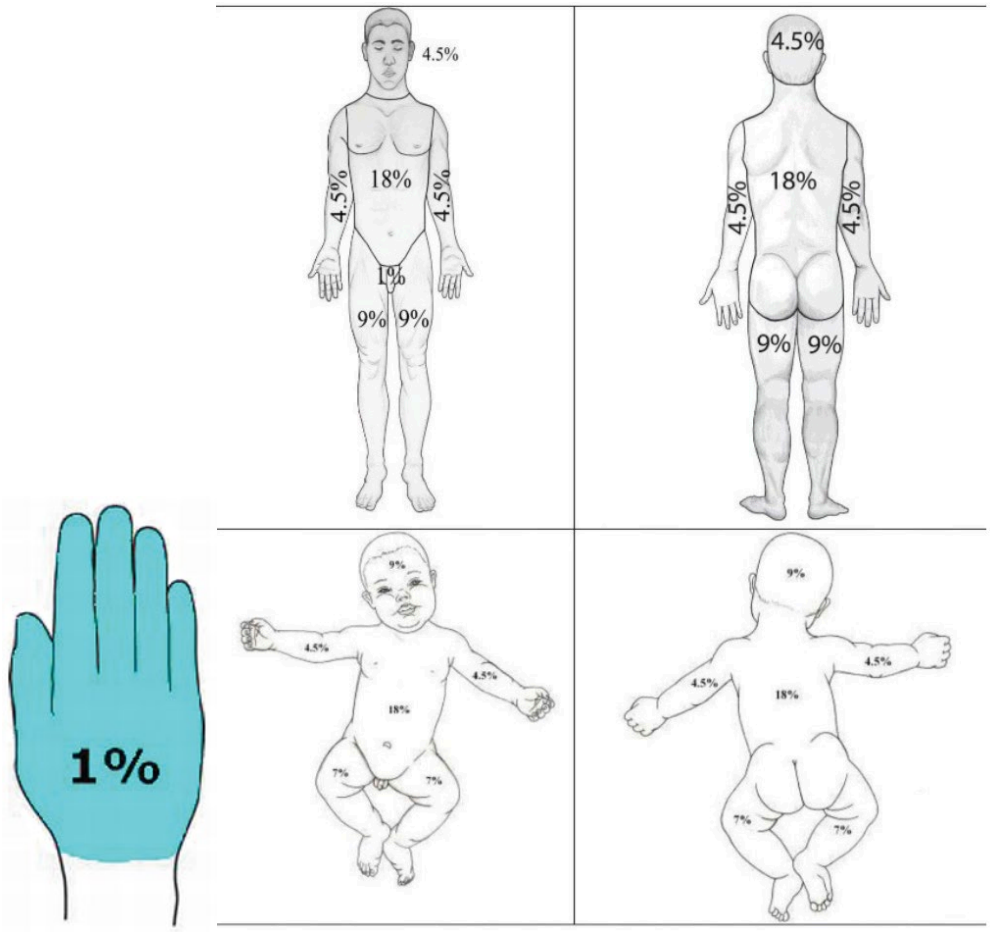

Figure 1: "Extent of Burn" American Burn Association Advisory Committee. *American Burn Association Provider Manual.*2018.

11. Apply dressings to burns as tolerated. Many partial thickness burn areas may feel better after dressings are in place.
    - In burns over 10% BSA or with longer transport times, apply a dry bedsheet, a dry burn sheet or dry sterile dressings to burn areas. Use an insulating layer such as a blanket over this dressing to lessen the chance of hypothermia. A commercially available burn dressing is acceptable when available.

- A vapor barrier may be useful in patients with longer transport times (for e.g Saran wrap®, a space blanket, or trash bag).
- Do not wrap injuries circumferentially as these types of dressings can be constrictive if swelling develops due to the burn injury.

12. Maintain normothermia. Covering the head may help prevent heat loss. Large burns may leak a significant amount of fluid, contributing to heat loss. During prolonged field care, sheet coverings that become wet may need carefully replaced or covered with insulating layers.

13. The elderly and children under 5 years of age represent the age group most often found with burns resulting from non-accidental trauma (NAT). Inspect for characteristic burns suspicious for NAT. The young child with burns to the back, buttocks, and posterior neck should alert suspicion of NAT. Circumferential scald burns of hands or feet that are clearly demarcated and uniform with no splash marks are also characteristic of NAT.

Injury-specific ALS considerations:

1. Airway management: Be prepared to manage the airway. Be alert for signs of inhalation injury (e.g. muffled voice, singed facial/nasal hairs, soot around nose or mouth, carbonaceous sputum, confinement in an enclosed space fire); these signs are less predicative of the need for intubation but require frequent reassessment. More concerning findings are unconsciousness, altered mentation, hypoxia, stridor, respiratory distress, or full thickness facial/neck burns.[4] Decision to intubate will require close assessment of a constellation of symptoms. Additional considerations of long transport times or large burn size (>40%), requiring high volume resuscitation, may require intubation. Patients with burns more than a few hours old may have elevated potassium levels, and care should be taken if considering the use of succinylcholine.

2. End-tidal CO_2 ($EtCO_2$): Low $EtCO_2$ may suggest shock and or a metabolic toxin (CN). High or increasing $EtCO_2$ may indicate impending ventilatory failure.

3. Cardiac monitoring is mandatory for all patients with electrical injuries, crush injuries, airway compromise, or cardiac symptoms and should be considered in patients with other comorbidities.

4. Burn injuries and the subsequent sequalae predispose the patient to lung injury. When able, a lung protective ventilation (tidal volume of 6ml/kg/IBW) strategy should be utilized.

5. Start at least one large bore IV in patients meeting any of the burn criteria in the beginning of this document. A second IV should be placed for large burns (>20%) or those presenting with altered mentation or other signs of shock. If accessible, a longer length catheter will tolerate swelling associated with burn edema. IVs may be inserted through burned area, if necessary. IO may be considered and, as with IV placement, a longer IO needle will be more likely to tolerate swelling. Humoral IO in adults is preferred. Frequent reassessment of patency is recommended.

6. For obvious large burns, begin age-appropriate burn fluid administration during the initial prehospital ALS care (until a formal TBSA can be calculated).

   Fluid administration guidelines:

   - For the first hour of initial stabilization, use an hourly rate:

     - Age ≤ 5 yo: 125ml /hr for children less than 5 years;
     - Age 6-13: 250ml/hour
     - Adults: 500ml/hour for those ≥ 14 years old, until an accurate assessment of burn injury may be performed

   - If transport will be greater than one hour, perform an initial assessment of TBSA using **the Rule of 9's** and begin initial fluid resuscitation based on the ABA Consensus formula (below). *Note: Use of the "Rule of 10" is an acceptable alternative and may be used, contingent upon local protocols.*

American Burn Association Consensus Formula:

2-4ml/kg/% TBSA Burn (LR preferred) in the 1st 24 hours
- Give ½ in the first 8 hours post-burn
- Give ½ in the next 16 hours post-burn

Adults: 2ml/kg/TBSA%
Children: 3ml/kg/TBSA%
Electrical: 4ml/kg/TBSA%

In Adults:
- Adjust fluid rate for goal urine output 0.5ml/kg/hr.
- For electrical injury, target urine output 1-2ml/kg/hr.

Children (<14yo)
- Adjust fluid rate for goal urine output of 1 ml/kg/hr.
- Children <30kg require dextrose-containing fluids, in addition to consensus formula above.

7. Avoid fluid bolus unless patient is hypotensive. In burn shock, this leads to increased total body edema. An exception is if the patient is hypotensive. In this situation, consider other causes for hypotension (concomitant trauma or underlying medical conditions) as acute burn injury is not likely to cause hypotension in early stages.

8. A Foley catheter will be required to monitor response to resuscitation. The goal for urine output in patients with burns is 0.5 ml/kg/hour in adults and at 1 ml/kg body weight in children up to 30 kg.

9. Insert nasogastric tube for all intubated burn patients.

10. Pain relief: Analgesia should be given in repeated small doses by IV/IO and titrated to effective pain control; monitor for respiratory depression. A combination of opioid analgesia, anxiolytics, and / or NSAIDs may be indicated and guided by medical direction.[5]

11. Give all medications intravenously/intraosseously for burns >20% TBSA.

12. Escharotomies are rarely required during prehospital care[6]. Follow local guidelines or consult with the burn accepting team prior to procedure.

13. A cyanide antidote should be considered (when available) for burn patients with exposure to smoke and the many byproducts of combustion if presenting with cardiac arrest, convulsions, burns with unexplained hypotension, altered mentation (GCS <10), or elevated lactate.[7] *Note: Hydroxocobalamin may interfere with laboratory analysis- obtaining samples for laboratory analysis prior to administration is helpful if it does not delay care and is within the scope and agreement of the agencies involved in patient care.*

14. Electrical burn management:

    - If the injury involves an electrical current, initiate cardiac monitoring. Treat cardiac dysrhythmias as per consultation or medical direction.
    - A history of the electrical injury (voltage and amperes) will be very helpful in determining the severity of injury. Document in the medical record if available.
    - In electrical burns where there is a large amount of pigment (hemoglobin or myoglobin) in the urine, urinary output should be maintained at 1.0 – 2.0 ml/Kg/hour until the urine is grossly clear, then fluids may be cut back to maintain the output in the range of 0.5 to 1.0 ml/Kg/hour in adults.
    - Use of bicarbonate and osmotic diuretics are rarely required and should be used only in consult with the accepting burn team[8].

SECTION 2: PROLONGED BURN CARE AT RURAL CLINIC/ HOSPITAL/ DURING TRANSFER

Most burn wound care will be performed at the definitive care site and transfer should be initiated as soon as practical. Delays may occur due to availability of transport, weather delays, distance, as well as large scale events requiring triage of patient movement. In situations of a prolonged stay at rural clinics and hospitals, wound debridement and dressing care may be performed if it does not interfere with resuscitation.[9] Cleansing, debridement and dressing care should be done in consultation with a burn specialist. The use of telemedicine can be very helpful to and guide wound care treatment decisions. Please remember that burn wound debridement is painful, and pain control will need to be addressed.

Cleansing and Debridement:

- Use standard precautions: gloves (non-sterile) and mask (this is not a sterile procedure but should be a clean procedure).
- Clean the burn: Wash gently with mild soap and clean water using clean washcloth or gauze. Do not scrub.
- Blister care:
    - If blister is < 2cm and not over a joint → do NOT debride.
    - If blister is >2cm or overlying a joint and would impair movement → debride.
    - Blisters may worsen over the first 24 hours. Daily reassessment is important and may reveal additional blisters requiring debridement.
- Debridement:
    - Most debridement can be performed with firm pressure applied with a washcloth to remove loose debris.
    - Loose skin can be lifted and trimmed back with clean scissors.
    - Avoid scrubbing motions when cleaning. Do not try to scrub off intact eschar.
    - Once debridement is complete, re-calculate TBSA. Proceed with wound care.

Wound Care:[10],[11],[12]

- Pat the burn wound dry.
- Wound care should be performed once daily. Wounds should be washed with soap and water; creams and ointments from previous wound care should be fully removed.
- For partial thickness burn wound(s) → antibiotic ointment should be applied on open areas and covered with greasy gauze or non-stick dressing.
- For full thickness burn wound(s) → silver sulfadiazine should be used (which penetrates the eschar). Antibiotic ointment may be used only if no other appropriate topical option is available. Cover with gauze or non-stick dressing.
- Lather ointments/creams onto dressing, not directly on the wound.
- Cover the topical dressing with a layer of dry dressing. Dressing should not be bulky but should be thin enough so the patient can move the affected area. Wrap digits in a glove-like fashion (not a mitten) to allow for range of motion.

Other Treatments:

- Tetanus should be administered if the patient has NOT had a tetanus booster shot in the past 5 years (burn wounds are considered a "dirty" wound).
- Antibiotics are unnecessary.
- Studies including a CBC, chemistry panel, VBG/ABG, 12 lead ECG and CXR are helpful when available, and if they do not prolong transport to definitive care.

Adjusted Burn Fluid Resuscitation

Assessment of the Burn Injury

An accurate assessment TBSA is paramount during the ongoing resuscitation of the burn-injured patient. The Lund and Browder chart (rather than the Rule of Nines) should be utilized to help re-calculate surface area as it accurately depicts the age-based variations in distribution of TBSA.[13] Providers should shade areas of the burned skin, including only partial and full thickness burns in the TBSA calculation. This may be done on a paper chart or using a software application. Telehealth consultation with a burn specialist may help with the accuracy of burn calculation. *See Appendix 1: Alaska Native Medical Center Initial Burn Chart*

Adjusted Fluid Administration

Partial and full thickness burns of >15 % TBSA in children (< 8 years) and 20% in adults will likely require fluid resuscitation over their initial course of care (which begins from the time of initial injury and continues for 24-48 hours). As described in the ABA consensus formula, the greatest need for volume restoration is in the initial 8 hours after burn. This is an estimate of need and should be adjusted based on patient response, which is most often guided by urine output. Begin administration at the calculated hourly rate, regardless of previous fluid administration. Previous fluid administration should be documented, but should not trigger "catch up" fluid administration or subtraction from the current consensus formula rate.

Similar to the prehospital care period during the first hour of initial stabilization, use an hourly rate of:

- Age ≤ 5 yo: 125ml /hr for children less than 5 years.
- Age 6-13: 250ml/hour.
- Adults: 500ml/hour for those ≥ 14 years old, until an accurate assessment of burn injury may be performed.

Avoid large fluid boluses during initial resuscitation. A systolic BP < 90mmHg is rare in the initial burn period. If encountered, a single 250-500ml bolus of crystalloid should be administered while considering alternative diagnosis/es for hypotension. This may include, but is not limited to medical, toxicologic, or traumatic comorbid condition(s). Consult the accepting Burn Facility or Regional Trauma Center for systolic < 90 or HR > 140.

American Burn Association Consensus Formula:

2-4ml/kg/% TBSA Burn (LR preferred) in the 1st 24 hours

- Give ½ in the first 8 hours post-burn
- Give ½ in the next 16 hours post-burn

Adults: 2ml/kg/TBSA%
Children: 3ml/kg/TBSA%
Electrical: 4ml/kg/TBSA%

In Adults:

- Adjust fluid rate for goal urine output 0.5ml/kg/hr.
- For electrical injury, target urine output 1-2ml/kg/hr.

Children (<14yo)

- Adjust fluid rate for goal urine output of 1 ml/kg/hr.
- Children <30kg require dextrose-containing fluids, in addition to consensus formula above.

Defining Targets for Ongoing Resuscitation

Hourly urine output remains one of the most critical assessments of patient response. Because the consensus formula is only a starting point and patients will vary in response to fluid resuscitation, frequently assess vital signs and document urine output every hour. Increase crystalloid administration rate by 10% / hour if urine output is under 30 ml/hr. Reduce rate of crystalloid by 10%/ hour if the urine output is above 30 ml/hr, and the MAP remains greater than 60 mmHg.

Precautions and Pitfalls

Several factors are known to increase fluid needs in burn resuscitation including concomitant inhalation injury, electrical burns, associated traumatic injuries, resuscitation delay, intoxication with drugs/alcohol, or very deep burn injury. These situations require extra attention when assessing response to burn resuscitation.

Glucose administration may be necessary in a child up to 30kg with a severe burn. Initial blood glucose should be obtained and monitored periodically thereafter. Treat with an age-appropriate bolus of glucose as needed. Note that hypoglycemia can be more common in Alaska Native people due to underlying genetics, specifically the CPT1A arctic variant. An example of a representative pediatric calculated fluid resuscitation equation is in Appendix 2.

Overzealous administration of fluid has been termed "fluid creep." This condition worsens burn outcomes and may increase the likelihood of compartment syndromes. This can occur as the result of incorrect estimation of burn size, fluid boluses, or excessive use of opioids and/or benzodiazepines. Care at multiple sites puts the patient at greater risk for fluid creep. It is imperative that judicious resuscitation and accurate handoffs occur at each point of transfer of care.

Balanced salt solution (e.g., LR) is preferred for burn resuscitation. Large amounts of normal saline (generally >3 liters for an adult) predisposes the patient to hyperchloremic acidosis.

Colloids may be helpful for burns refractory to initial fluid resuscitation but should only be given in consult with a burn/trauma specialist.

Vasopressors are infrequently utilized during burn shock stabilization; administration is recommended only under consultation with the regional burn/trauma specialist.

Considerations for the Truly Austere Environment

In the austere environment, or in areas with inability to establish IV/IO access, alternative methods of resuscitation have been effectively employed. Consult the burn specialist or regional trauma center for guidance. See further guidance below regarding oral resuscitation.

Oral Resuscitation[14]

Oral resuscitation is feasible and favorable for small-to-moderate sized burns. Burns < 20% TBSA do not require IV fluid resuscitation.

At time of transport, it is important to communicate oral intake to the receiving center. NPO status may be requested in anticipation of needed sedation for procedures. Maintenance IV fluids can be initiated at that time. Children should receive fluids with dextrose to avoid hypoglycemia.

For large burns (>20% TBSA), oral resuscitation has largely been abandoned in the United States, as IV fluids are readily available. However, in austere conditions or prolonged stay in a limited-resource setting, oral rehydration therapy (ORT) may be used.[15] The gastrointestinal tract can absorb up to 20L per day, which can suffice for resuscitation needs if an IV/IO is not able to be placed or if IV fluids are unavailable. If ORT is initiated, occasional episodes of nausea or vomiting are inevitable due to the large volumes required and these symptoms are not a reason to discontinue ORT. Have the patient sip fluids every 5 minutes with goal 4 cups (or 1L) every hour. Wait 10 minutes after vomiting and then resume sips. Monitor urine output and titrate as needed.

Oral Resuscitation examples:

- Pedialyte®
- Gatorade® or PowerAde®
- Oral Rehydration Salts
- Homemade recipe (from the Utah CSC guidelines): 1L clean water + 1 tsp. salt + 3 tbsp sugar

An alternate option is rectal infusion therapy of tap water or saline, which can infuse up to 400ml/hr in an adult.

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[12] ISBI Practice Guidelines Committee; Advisory Subcommittee; Steering Subcommittee. ISBI Practice Guidelines for Burn Care, Part 2. Burns. 2018 Nov;44(7):1617-1706. doi: 10.1016/j.burns.2018.09.012. Epub 2018 Oct 19. PMID: 30343831.

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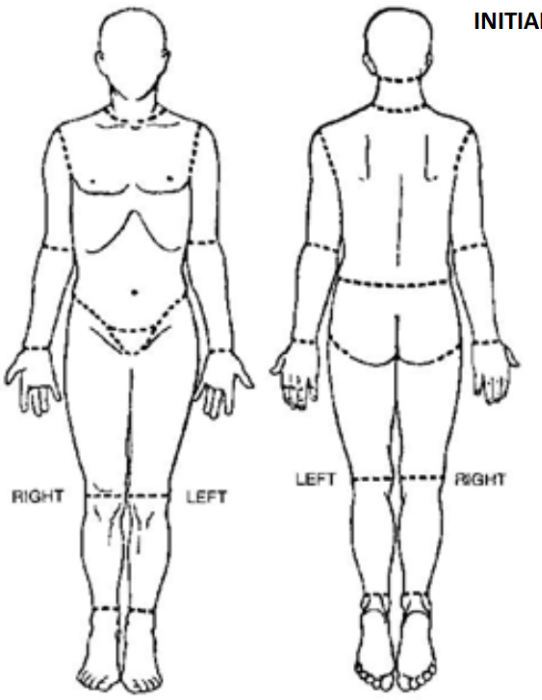
Appendix 1

ALASKA NATIVE MEDICAL CENTER

* ENP*



INITIAL BURN CHART

DATE: _____

COMPLETED BY: _____

PARTIAL THICKNESS	+	FULL THICKNESS	= _____ %

PARTIAL THICKNESS

FULL THICKNESS

AREA	1 YEAR	1-4 YEARS	5-9 YEARS	10-14 YEARS	15 YEARS	ADULT	PARTIAL THICKNESS	FULL THICKNESS
HEAD/NECK	21	19	15	13	11	9		
ANT. TRUNK	13	13	13	13	13	13		
POST. TRUNK	13	13	13	13	13	13		
R. BUTTOCKS	2.5	2.5	2.5	2.5	2.5	2.5		
L. BUTTOCKS	2.5	2.5	2.5	2.5	2.5	2.5		
GENITALIA	1	1	1	1	1	1		
R. ARM	7	7	7	7	7	7		
L. ARM	7	7	7	7	7	7		
R. HAND	2.5	2.5	2.5	2.5	2.5	2.5		
L. HAND	2.5	2.5	2.5	2.5	2.5	2.5		
R. LEG/FOOT	14	15	17	18	19	20		
L. LEG/FOOT	14	15	17	18	19	20		
TOTAL								

Patient Identification Label

ANMC Initial Burn Chart – WDC Approved 3/11/2014. V1

Appendix 2 Fluid Resuscitation Equation Examples

Adult Example

24-year-old female who weighs 80kg with 45% scald injury.

Calculated initial rate: **2ml x 80kg x 45 TBSA = 7,200ml in the first 24 hours.** To get the hourly initial rate (in the first 8 hours): 7,200 / 2 / 8 = **450mL/hr.**

Pediatric Example

5-year-old boy who weighs 20kg with 30% TBSA.

Calculated initial rate: **3ml x 20kg x 30 TBSA = 1,800ml in the first 24 hours.** To get the hourly initial rate (in the first 8 hours): 1,800 / 2 / 8 = **112.5 ml/hr** PLUS calculate additional dextrose-containing weight-based maintenance fluids using the hourly requirement referred to as the "4-2-1 rule" (4 mL/kg/hr for the first 10 kg of weight, 2 mL/kg/hr for the next 10 kg, and 1 mL/kg/hr for each kilogram thereafter): (4ml x 10kg) + (2ml x 10kg) + (1ml x 0kg) = **60ml/hr. These two together (112.5ml/hr + 60ml/hr) will summarily total 172.5ml/hr.**

https://www.mdcalc.com/maintenance-fluids-calculations

Delayed Presentation Example

25-year-old man who weighs 80kg with 45% thermal injury *who presents 4 hours after injury*.

Calculated initial rate: **2ml x 80kg x 45 TBSA = 7,200ml in the first 24 hours.** To get the hourly initial rate (in the first 8 hours): 7,200 / 2 / 8 = **450mL/hr.** Calculated initial rate: **2ml x 80kg x 45 TBSA = 7,200ml.** To get the hourly initial rate (for after 8 hours): 7,200 / 2 / 16 = **225mL/hr.** Do not bolus to "catch up." Anticipate that this patient will require more fluid than the calculated rate.

Appendix 3 Palliative Care of the Burn-Injured Patient

In daily clinical practice it is not always easy to prognosticate survival of burn injuries. A recognition that some patients with burn injury will not survive the event may help prevent unnecessary cost, overtriage and the risks of transfer. The trauma/burn specialist may be a useful consult and help determine likely outcomes and optimal destination for care. In burns with high likelihood for mortality, a goals of care conversation, with patient or surrogate and family may help guide decision making to ensure the best course of treatment.

Key components of palliative care are the relief and prevention of suffering; including assessment and aggressive treatment of pain and anxiety. Family presence should be facilitated. If a decision is made to transition to comfort care prior to transfer it may be appropriate for the patient to remain in the local setting to receive comfort care rather than transport. Transfer may still be necessary if the local facility does not have the resources or experience to provide the care required.

Young AW, Graves C, Kowalske KJ, Perry DA, Ryan CM, Sheridan RL, Valenta A, Conlon KM, Jeng JC, Palmieri T. Guideline for Burn Care Under Austere Conditions: Special Care Topics. J Burn Care Res. 2017 Mar/Apr;38(2):e497-e509. doi: 10.1097/BCR.0000000000000369. PMID: 27355657.

Appendix 4 Helpful Links and Contacts

Harborview Medical Center Transfer Center 888-731-4791

Alaska Native Medical Center Transfer Center 907-729-2337

Providence Alaska Medical Center 907-212-7363

Alaska Pediatric Medical Direction- Ask for Pediatric Intensivist
ANMC 907-297-8809
Providence Alaska Medical Center 907-212-3133

Alaska Child Abuse Hotline 1-800-478-4444

Poison Control 1-800-222-1222

Airlift Northwest 1-800-426-2430

Guardian Flight 1-888-997-3822

Lifemed Alaska 1-800-478-5433