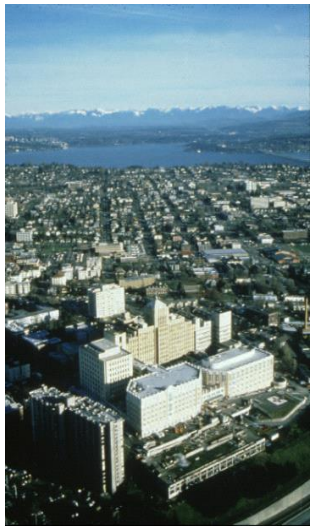

CARE OF THE PEDIATRIC BURN PATIENT IN A DISASTER

University of Washington Burn Center at Harborview

NW Regional Burn Center

Level 1 Pediatric & Adult Trauma Center

Serving Washington, Alaska, Montana and Idaho (WAMI)

UW Medicine

Sponsored by NORTHWEST HEALTHCARE Response Network

ASSESSMENT OF BURN DEPTH

First degree
(Superficial Partial Thickness)
Involves epidermal layer
Usually appears red to pink
May become slightly edematous
Very painful to the touch
Heals within 3-5 days

Does NOT count in the burn calculation

SUPERFICIAL PARTIAL THICKNESS BURN

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ASSESSMENT OF BURN DEPTH

Second Degree
Involves the epidermis and dermis
Red to pale ivory and moist
Vesicles and bullae
Tactile and pain sensibility intact
Develops significant edema

PARTIAL THICKNESS BURN

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ASSESSMENT OF BURN DEPTH

Third degree (Full Thickness)

- Extends through epidermis/dermis
- White, brown, black, or red
- Elasticity of the dermis is destroyed
- Less pain to the touch
- Requires grafting

FULL THICKNESS BURN

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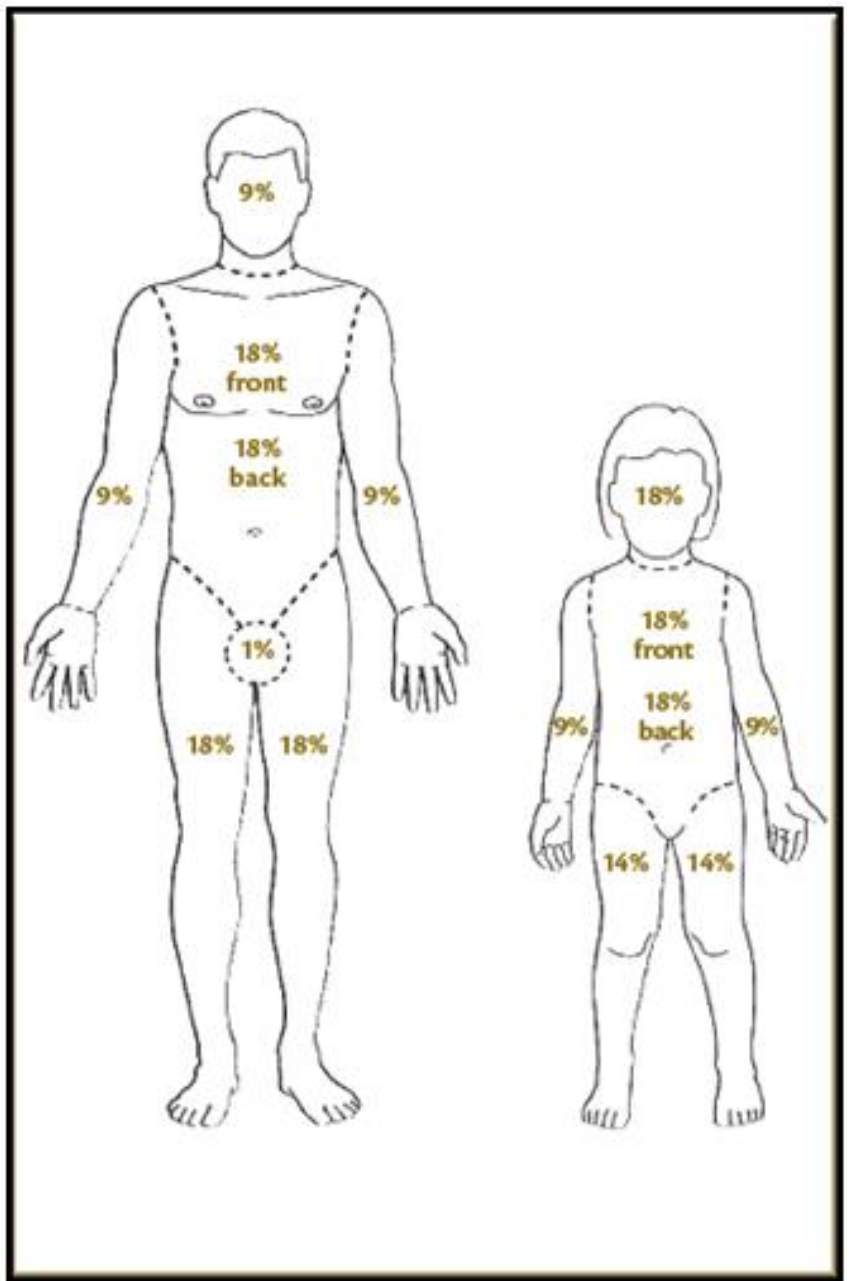
RULE OF NINES: % TBSA



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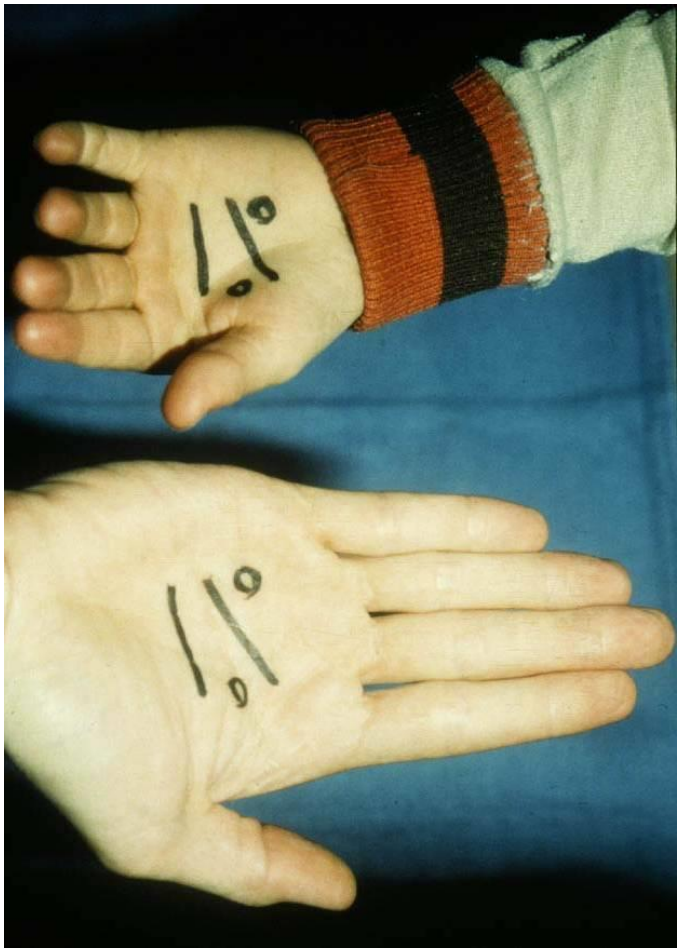
RULE OF THE PALM

- The **patient's** palmer surface is roughly 1% of his or her total body surface area
- Good for estimating small burns and splash burns
- Works for all age groups



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PRACTICE # 1

- 1 y/o male pulled a hot cup of coffee off the table. Mom immediately took off his clothes and placed him in the shower before bringing him to the ED. He weighs 10 kg.

- What's the depth of the burn?
  - Superficial partial thickness
  - Partial thickness
  - Full thickness

- Calculate % TBSA (total body surface area burned)

- Calculate fluid resuscitation needs

?

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IV ACCESS

< 15% TBSA

- oral resuscitation

15 – 40% TBSA

- one large bore IV

> 40% TBSA

- two large bore IV's

Upper extremities preferred

Suture IVs through burns

FLUID RESUSCITATION

Establish large bore IV's

Consensus Formula (Guideline)

(2 - 4 mL of LR) x (%TBSA) x (Weight/ kg)

mL fluid required in first 24 hours

1/2 given in first 8 hours

1/4 given second 8 hours

1/4 given third 8 hours

PEDIATRIC EXAMPLE

(2-4mL) 3 mL LR x 50% TBSA x 10 kg
= 1,500 mL/24 hrs

750 mL 1st 8 hours = 94 mL/hr

750 mL next 16 hrs hours = 46 mL/hr

DISASTER DRESSING OPTIONS

- Clean
- Sterile not necessary
- Cotton t-shirts, gloves, cloth diapers,socks
- Pillow cases for extremities
- Conform to body contours
- Simple - easy for patient to use for home care
- Inexpensive

SILVER SULFADIAZINE: SSD

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WHAT'S THE BEST DRESSING?

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END RESULTS IN ONE WEEK

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SILVER IMPREGNATED DRG:ACTICOAT AG

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PRACTICE # 2

- 8 y/o male sitting several feet away from a fire pit when an adult threw an accelerant on it catching his clothes on fire. He weighs 26 kg.

- What's the depth of the burn?
  - Superficial partial thickness
  - Partial thickness
  - Full thickness

- Calculate % TBSA (total body surface area burned)

- Calculate fluid resuscitation needs

?


EMERSON, JOSHU
Study Date:6/28/
Study Time:15:2
MRN:H359


Study Date:6/28/
Study Time:15:
MRN:H359

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PRACTICE # 3

- 2 y/o female in a house fire. She weighs13 kg
- What's the depth of the burn?
  - Superficial partial thickness
  - Partial thickness
  - Full thickness
- Calculate % TBSA (total body surface area burned)
- Calculate fluid resuscitation needs

TRIAGE DECISION TABLE

Benefit-to-Resource Ratio
Based on Age & Total Burn Size

CAVEAT This grid is intended only for mass burn casualty disasters where responders are over-whelmed and transfer possibilities are insufficient to meet needs.

	Burn Size (%TBSA)									
Age/ years	0 – 10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%
0-1.99	High	High	Medium	Medium	Medium	Medium	Low	Low	Low	Expectant
2-4.99	Outpatient	High	High	Medium	Medium	Medium	Medium	Low	Low	Low
5-19.9	Outpatient	High	High	High	Medium	Medium	Medium	Medium	Medium	Low
20-29.9	Outpatient	High	High	High	Medium	Medium	Medium	Medium	Low	Low
30-39.9	Outpatient	High	High	Medium	Medium	Medium	Medium	Medium	Low	Low
40-49.9	Outpatient	High	High	Medium	Medium	Medium	Medium	Low	Low	Low
50-59.9	Outpatient	High	High	Medium	Medium	Medium	Low	Low	Expectant	Expectant
60-69.9	High	High	Medium	Medium	Medium	Low	Low	Low	Expectant	Expectant
70+	High	Medium	Medium	Low	Low	Expectant	Expectant	Expectant	Expectant	Expectant

RESOURCES

- I Tunes University: Burn 101
- American Burn Association: ameriburn.org
- Think outside the disaster in a disaster
- Have resources available sooner than later

NAME THAT BURN

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ARE YOU READY ?