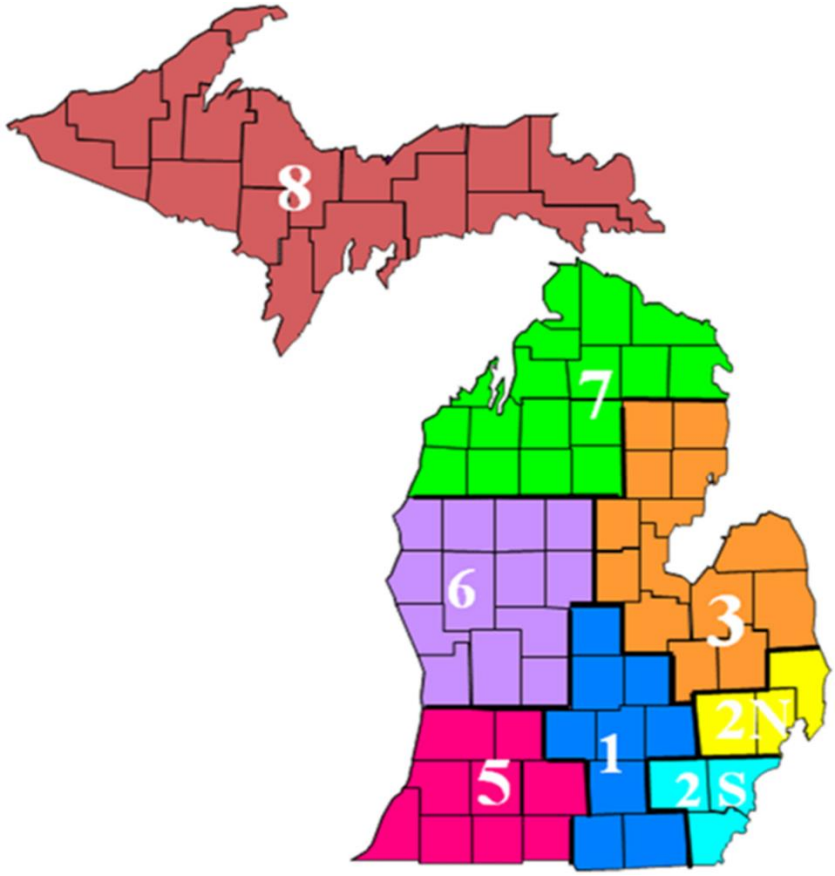
STATE OF MICHIGAN

PEDIATRIC BURN MASS CASUALTY INCIDENT

APPENDIX 1

VERSION 7.0 9.06.2023



State Burn Coordinating Center

MDHHS Michigan Department of Health & Human Services

Bureau of Emergency Preparedness, EMS and Systems of Care

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Contents

Pediatric Burn Surge Annex

During an incident it would be important to rapidly deploy pediatric medical expertise and supplies to any medical facility experiencing the influx of a large number of pediatric burn patients.

Such assistance will be provided in the form of Burn Surge Strike Teams equipped with a cache of airway and vascular access supplies suitable for pediatric patients. Five EMS flight services have agreed to transport these Burn Surge Strike Teams to the scene, the local medical facility, or the nearest Burn Surge Facility (BSF) in support of the triage, treatment and transport of patients. The strike teams will assist with initial stabilization, advanced airway management and intravenous (IV) and interosseous (IO) access for the pediatric patient. The configuration of the team will be dependent on the incident: it will include the pilot/driver and a flight nurse as well as one or more of the following:

- Additional flight nurse or paramedic
- Senior burn nurse
- Pediatric Critical Care Nurse
- Physician:
    - Flight Physician
    - Pediatric Emergency Medicine Senior Resident or Fellow
    - Senior Emergency Medicine Resident or Fellow
    - Senior Level Pediatric Surgical Resident or Fellow
    - Pediatric Critical Care Fellow

Activation and dispatch of these Burn Surge Strike Teams will be done at the direction of the SBCC medical director in consultation with the Community Health Emergency Coordination Center (CHECC).

The lead flight service will be Survival Flight who will notify the other four flight services for situational awareness of potential transport flights. This will be done in coordination with the SBCC. The primary flight service will be the one closest to the incident.

The purpose of this annex is to provide guidance for the care of the pediatric patients injured in a Burn Mass Casualty Incident (BMCI). The goals of this annex are to:

- Provide highest level of care for a large number of pediatric burn patients
- Expand ability to provide burn care
- Prioritize use of limited resources
- Support Michigan healthcare facilities caring for a surge of pediatric burn patients.

This document outlines the plan and resources that have been developed to provide care for pediatric patients involved in a BMCI including:

- Initial resuscitation
- Fluid management
- Airway control
- Mechanical ventilation
- Pain control
- Wound assessment and management

The pediatric patient is more vulnerable to weather conditions and toxic exposures because they are shorter and therefore closer to the ground. Their motor skills and cognitive reasoning may put them in harm's way because they cannot fully comprehend the dangers and the need to escape from a situation. They may even gravitate towards the danger out of curiosity. They may become frightened of the first responders because of PPE gear as well as the fact that they are strangers. They may become separated from other family and will need assistance and supervision. They are also more vulnerable from a physiologic status:

Table # 1

Pediatric Characteristic	Special risk during disaster
Respiratory	Higher minute volume increases risk from exposure to inhaled agents.
Gastrointestinal	Higher risk for dehydration from vomiting and diarrhea after exposure to contamination.
Skin	Higher body surface area increases risk for skin exposure. Skin is thinner and more susceptible to injury from burns, chemicals and absorbable toxins. Evaporation loss is higher when skin is wet or cold, so hypothermia is more likely.
Endocrine	Increased risk for thyroid cancer from radiation exposure.
Thermoregulation	Less able to cope with temperature problems, with higher risk for hypothermia.
Developmental	Lower ability to escape environmental dangers or anticipate hazards.
Psychological	Prolonged stress from critical events. Susceptible to separation anxiety.

Basic Treatment Considerations

Children have a greater surface area per unit of body weight than adults and require relatively greater amounts of resuscitation fluid. Children have a higher percentage of Body Surface Area (BSA) devoted to the head relative to the lower extremities.

- The ratio of BSA: is highest at birth and diminishes as the child grows.
- The large head also contributes to larger heat loss.
- Pediatric skin is thinner and more permeable; toxins, if present will be absorbed faster and exert greater systemic effects.
- Smaller children have limited glycogen stores which can be rapidly depleted under stress; they should receive a maintenance fluid of D5LR, in addition to resuscitation fluids. (Refer to the **Exemplar Burn Resuscitation Fluid Calculations** page of *Pediatric BMCI Surge Appendix*).

Vital Signs at Various Ages
Table # 2

Age	Heart Rate (beats/min)	Blood Pressure (mm Hg)	Respiratory Rate (breaths/min)
Premature	120-170	55-75/35-45	40-70
0-3 mo.	100-150	65-85/45-55	35-55
3-6 mo.	90-120	70-90/50-65	30-45
6-12 mo.	80-120	80-100/55-65	25-40
1-3 yr.	70-110	90-105/55-70	20-30
3-6 yr.	65-110	95-110/60-75	20-25
6-12 yr.	60-95	100-120/60/75	14-22

Kleigman, R.M., et. al. Nelson Textbook of Pediatrics, 19th Edition. Saunders. Philadelphia.

*****It is important to keep the patient NPO until assessment has been completed*****

Special Airway Considerations for the Pediatric Patient

AIRWAY

Anatomical differences to be aware of:

- The tongue is relatively large compared with the oropharynx, which may create an obstruction
- The larynx is higher and more anterior in the neck, the vocal cords are at a more antero-caudal angle
- The epiglottis is omega shaped and soft
- The narrowest portion of the airway is the cricoid ring, not the vocal cords
- Significant burns to the nasal passage of infants < 6 months can cause airway compromise due to obligatory nose breathing

Intubation

Emergently intubate:

- Burns to mouth and/or nose
- Stridor, wheezing, respiratory distress, hypoxia
- Altered mental status with inability to protect airway

Urgent evaluation of airway:

- Carbonaceous sputum
- Facial burns
- Cough with distress, stridor or hypoxia
- Prolonged closed space heat exposures
- Large burns >20%

Early intubation, if airway control is needed, is vital to prevent a future difficult intubation scenario.

- Keep Patient NPO
- Administer 100% Oxygen
- Elevate HOB
- Appropriate size Endo-Tracheal Tube (ETT)
- Appropriate securing device
    - Commercial device
    - Tape/Twill tape/Trach ties
- Naso-Gastric Tube (NGT)/Oral Gastric Tube (OGT) inserted

The following table can be used for reference and to assist with the induction for intubation.

RAPID SEQUENCE INTUBATION AGENTS

Table # 3

Agent	Dosage	Duration of Action	Comment
Induction			
Etomidate	0.2 – 0.4 mg/kg	10-15 minutes	Rapid onset 30-60 sec, peaks in 1 minute
Versed	0.1 -0.2 mg/kg	30-60 minutes	
Fentanyl	1 – 5 mcg/kg	1-2 hours	
Paralytics			
Rocuronium	1mg/kg	30 – 60 minutes	Rapid onset
Vecuronium	0.1 mg/kg	30-90 minutes	

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Equipment and Supplies

The following tables can be used for reference to assist with appropriate equipment and tube sizes.

**Cuffed endotracheal tubes should be used if available

Equipment Sizes: Up to 20Kg
Tables # 4

Weight	3 kg	5 kg	10 kg	15 kg	20 kg
ETT	3-3.5	3.5-4.0	4-4.5	4.5-5.0	5.0-5.5
L Blade	Miller 0-1	Miller 0-1	Miller 0-1	Miller 1-2	Miller 2
Suction	6-8 Fr	8-10 Fr	10 Fr	10 Fr	10 Fr
NG Tube	5-8 Fr	5-8 Fr	8-10 Fr	10-12 Fr	12-14 Fr
Foley	6-8 Fr	6-8 Fr	8-10 Fr	10-12 Fr	10-12 Fr
Chest Tube	10-12 Fr	12-16 Fr	16-20 Fr	20-24 Fr	24-32 Fr
LMA (cuff)	1 (4 mL)	1.5 (7 mL)	2 (10 mL)	2 (10 mL)	2-2.5 (14 mL)

Equipment Sizes: greater than 20kg
Table # 5

Weight	20 -25 kg	30 kg	40 kg	> 50 kg
ETT	5.5-6.0 cuff	6.0-6.5 cuff	7.0-7.5 cuff	7.5-8.0 cuff
L Blade	Mil/Mac 2	Mil/Mac 2-3	Mil/Mac 3	Mil/Mac 3
Suction	10 Fr	10 Fr	12 Fr	12-14 Fr
NG Tube	12-14 Fr	14-26 Fr	14-16 Fr	16-18 Fr
Foley	12 Fr	12 Fr	12-14 Fr	12-14 Fr
Chest Tube	28-32 Fr	28-32 Fr	32-40 Fr	32-40 Fr
LMA (cuff)	2.5 (17 mL)	3 (20 mL)	3 (20 mL)	4-6 (30-50 mL)

Ventilator Management

Pediatric patients have smaller and more delicate lungs that are susceptible to barotrauma. Children have a unique respiratory physiology; they have higher minute ventilation per kg than adults. Because they have a higher respiratory rate than adults, they are exposed to greater dosages of toxins that may be present during a BMCI and will suffer the effects of these agents much more rapidly than adults. They also will potentially absorb more of the substance before it is cleared or diffused from the respiratory tissues. Many chemical agents have a high vapor density and are heavier than air, which means that they "settle" close to the ground, in the air space used by children.

Suggested Initial Ventilator Settings
Table # 6

Ideal Body Weight	≤ 5 kg	10-15 kg	15-25 kg	25-35 kg	> 35 kg
Mode	Pressure Control	Pressure Control	Pressure Control	Pressure Control	Pressure Control
Rate (bpm)	35-55	25-40	20-35	18-28	14-22
Inspiratory Pressure	Contact Physician for Settings	10-12 cm H_2O	10-15 cm H_2O	18-20 cm H_2O	18-20 cm H_2O
PEEP		5-8 cm H_2O	5-10 cm H_2O	5-10 cm H_2O	5-10 cm H_2O
PIP*		15-20 cm H_2O	15-25 cm H_2O	25-28 cm H_2O	25-28 cm H_2O
FiO2**	100%	100%	100%	100%	100%
Inspiratory time		0.6 sec.	0.8 sec.	1.0 sec.	1.0 sec.

*Peak Inspiratory Pressure = Inspiratory Pressure + PEEP.

** Wean oxygen as tolerated

Ensure ventilator settings provide good chest rise and equal breath sounds. Too much pressure could cause a pneumothorax, explaining why changes are made slowly for equal chest rise.

- Effective ventilator changes for:
  - Poor Oxygenation: increase FiO2, increase PIP or PEEP
  - High CO2: increase rate, increase PEEP
    (**Make changes separately** to identify which change improved ventilation or oxygenation).
- Burn patients undergoing fluid resuscitation typically require higher ventilator pressures.
- For patients with circumferential burns of the torso/abdomen escalating ventilator pressures may indicate the need for escharotomies.

*****If considering escharotomy contact the SBCC*****

734-936-2876

Sedation:

Ongoing sedation for care while waiting for and during transport should be considered. Does the patient need to be restrained? Consider the use of arm immobilizer as well as soft restraints, whichever method is presently used by the transport teams.

Table # 7

Agent	Age	Dosage	Max Doses
Versed	GA ≤ 32 weeks	0.03 mg/kg/hr.	0.06mg/kg/hr.
	> 32 weeks	0.06 mg/kg/hr.	0.12mg/kg/hr.
Loading dose	1 month – 18 yrs.	0.05 – 0.2 mg/kg	Given slow IV over 2-3 minutes
Continuous IV		0.06 – 0.12 mg/kg/hr.	0.36 mg/kg/hr.; titrate to effect
Morphine	< 50kg	0.01 mg/kg/hr.	0.04 mg/kg/hr.
	≥ 50 kg	1.5 mg/hr.	
Fentanyl	< 50 kg	Load: 1 – 10 mcg/kg <5 mcg/kg 3-5 minutes >5mcg/kg 5-10 minutes	1 - 10 mcg/kg hr.

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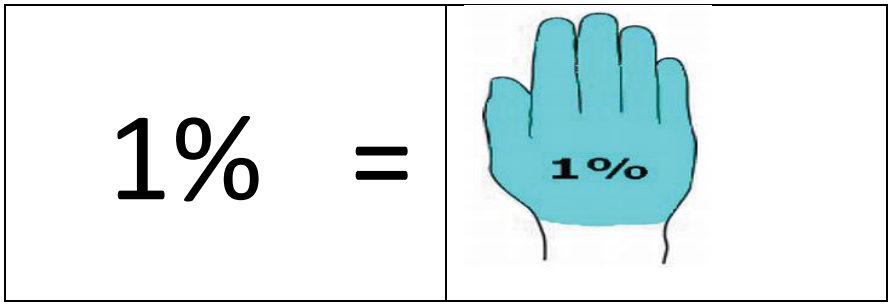
Burn Assessment Models

Assessing the patient's burns and estimating the area involved is important for the resuscitation phase of care. This can be done in several ways. Two methods are the palm method and the Lund and Browder chart. It is important to note that only partial and full thickness burns are to be included in the Total Body Surface Area (TBSA) estimation.

The Palm Method - Is an extremely easy and is very helpful when the burns are scattered over the body. With this method and using the PATIENT'S hand as a guide, the palmar surface is equal to 1% of the patient's body.

Diagram # 1

The Palm Method

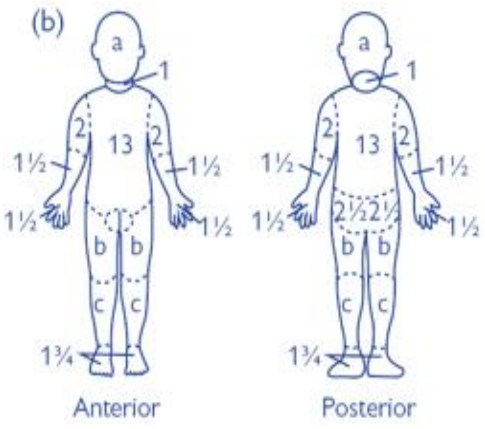


Defining Total Body Surface Area (TBSA) (phoenix-society.org)

Lund and Browder Chart - If used correctly, is the most accurate method for determining TBSA burns in pediatrics. It compensates for the variation in body shape with age and therefore can give an accurate assessment of burns area in children.

Diagram # 2

Lund and Browder Chart



Relative percentage of body surface area (% BSA) affected by growth

	Age				
Body part	0y	1y	5y	10y	15y
a = ½ of head	9½	8½	6½	5½	4½
b = ½ of one thigh	2¾	3¼	4	4¼	2½
c = ½ of one lower leg	2½	2½	2¾	3	3¼

Defining Total Body Surface Area (TBSA) (phoenix-society.org)

Fluid Resuscitation

Maintaining normal body temperature in infants and children is also affected by the child's relatively greater BSA-to-weight ratio. Intrinsic heat is generated by shivering. This mechanism is hampered in children less than six months due to limited muscle mass. Temperature regulation for this age group depends more on intrinsic metabolic processes and the environmental temperature control. Therefore, it is so important to keep the child warm by utilization of room warmers, warm blankets, warmed fluids, etc., especially during the resuscitation phase.

If IV access cannot be obtained, intraosseous (IO) access should be used.

1. Initial starting points for fluid resuscitation for pediatric patients (rate to be adjusted once TBSA is calculated)
    a. ≤ 1 year: discuss with burn unit attending physician
    b. ≤ 5years: 125 ml Lactated Ringers (LR) per hour
    c. 6-13 years old: 250 ml LR per hour
    d. ≥ 14 years: 500 ml LR per hour
2. **Pediatric patients with burns ≥ 20% TBSA require resuscitative fluids in addition to maintenance fluids**. (see Table for exemplar Calculations)
    a. 3ml **Lactated Ringers** x Kg x TBSA (only partial and full thickness burns) is the estimated resuscitation fluid requirement for the first 24 hours.
    b. Divide total by 2 and administer this amount in the first 8 hours from the time of injury. The remaining half to be given over the next 16 hours.
    c. For patients **under 30kg** give Dextrose 5% Lactated Ringers (D5LR) at a maintenance rate in addition to the fluid resuscitation.
    d. If the patient remains in a BSF after fluid resuscitation has been completed, run maintenance IV fluids until adequate PO intake is maintained.
3. Urine Output
    a. Target is 1-2 ml/kg/hr. (adjusting rate of resuscitation fluid in response)
        i. Patients ≤30 kg: 0.8 -1.2 mL/kg/hr.
        ii. Patients > 30 kg: 0.3 mL- 0.7mL/kg/hr.
    b. Low urine output for two (2) consecutive hours:
        i. Patient is less than or equal to 30 kg: urine output is < 0.8 mL/kg/hr. or Patient is greater than 30 kg: urine output is < 0.3 mL/kg/hr.
            1. Increase fluid rate by 15%
            2. Repeat x 1 if urine output remains low
        ii. If urine output remains inadequate after two (2) 15% escalations start Albumin infusion if not already done
        iii. If urine output remains low x two (2) consecutive hours after Albumin infusion started, call SBCC

iv. Start dopamine drip at 3 mcg/kg/min

c. High urine output for two (2) consecutive hours
    i. Patient is < 30 kg: urine output > 1.2 mL/kg/hr.
    ii. Patient is > 30 kg: urine output is > 0.8 mL/kg/hr.
        1. Dip urine to exclude glycosuria.
        2. Reduce fluid rate by 15%

<u>Colloid:</u>

Albumin infusion should be started at 8 hours post *injury.* 25% Albumin at 2 gm/kg/day infused over 24 hours x 3 days. Albumin may be started before hour 8 for low urine output.

Table # 8

Exemplar Burn Resuscitation Fluid Calculations				
Patient Weight	**TBSA burn**	**Calculation**	**Estimated 24h Resuscitation Total** (NOT including maintenance fluids)	**Fluid type** (dependent on patient weight)
8 kg	20%	3 x 8 x 20	480 ml	D5 LR
8 kg	40%	3 x 8 x 40	960 ml	D5 LR
8 kg	60%	3 x 8 x 60	1,440 ml	D5 LR
8 kg	80%	3 x 8 x 80	1,920 ml	D5 LR
10 kg	20%	3 x 10 x 20	600 ml	LR
10 kg	40%	3 x 10 x 40	1,200 ml	LR
10 kg	60%	3 x 10 x 60	1,800 ml	LR
10 kg	80%	3 x 10 x 80	2,400 ml	LR
20 kg	20%	3 x 20 x 20	1,200 ml	LR
20 kg	40%	3 x 20 x 40	2,400 ml	LR
20 kg	60%	3 x 20 x 60	3,600 ml	LR
20 kg	80%	3 x 20 x 80	4,800 ml	LR
30 kg	20%	3 x 30 x 20	1,800 ml	LR
30 kg	40%	3 x 30 x 40	3,600 ml	LR
30 kg	60%	3 x 30 x 60	5,400 ml	LR
30 kg	80%	3 x 30 x 80	7,200 ml	LR
40 kg	20%	3 x 40 x 20	2,400 ml	LR
40 kg	40%	3 x 40 x 40	4,800 ml	LR
40 kg	60%	3 x 40 x 60	7,200 ml	LR
40 kg	80%	3 x 40 x 80	9,600 ml	LR
50 kg	20%	3 x 50 x 20	3,000 ml	LR
50 kg	40%	3 x 50 x 40	6,000 ml	LR
50 kg	60%	3 x 50 x 60	9,000 ml	LR
50 kg	80%	3 x 50 x 80	12,000 ml	LR

*** Give HALF (1/2) of the estimated 24-hour resuscitation fluid total OVER THE FIRST 8 HOURS post-injury, in addition to maintenance fluids***

Assessing Dehydration in Children

Table # 9

Feature	Mild (<5%)	Moderate (5% to 10%)	Severe (>10%)
Appearance	Active, alert	Irritable, alert, thirsty	Lethargic, looks sick
Skin perfusion	Normal capillary refill (<2 seconds)	Capillary refill slowed (2-4 seconds); skin cool to touch	Capillary refill markedly delayed (>4 seconds); skin cool, mottled, gray
Pulse	Normal	Slightly increased	Rapid, weak
Respirations	Normal	Fast	Fast and deep
Systolic BP	Normal	Normal to orthostatic, >10 mmHg change	Hypotension
Mucous membranes	Slightly dry	Very dry	Parched
Tears	Present	Decreased, eyes sunken	Absent, eyes sunken
Eyes	Normal	Normal to sunken	Sunken
Skin	Normal turgor	Decreased turgor	Tenting
Anterior fontanel	Normal	Normal to sunken	Sunken
Urine output	Decreased	Moderately decreased	Marked decrease, anuria

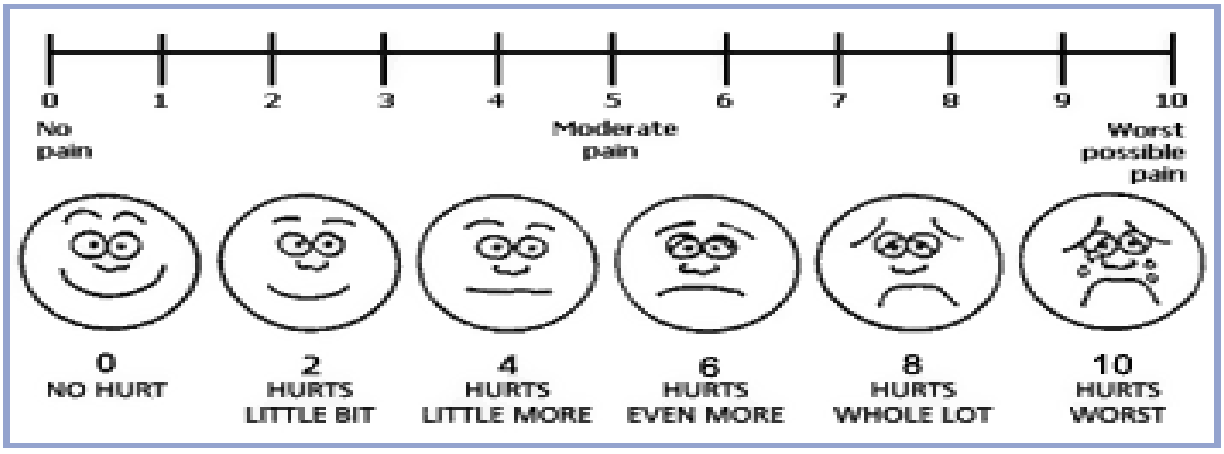
PAIN MANAGEMENT

The patient should only be given medication through IV access or IO access when available. (Oral or IM route can have a variable absorption rate).

- Fentanyl 0.5 - 1 mcg/kg/dose Every 5 minutes with a Max of 2 mcg/kg/hour OR
- Morphine 0.05 – 0.1 mg/kg dose. May repeat to 0.2 mg/kg/hr. max dose.
- Oral pain medication should be reserved either for patients with very minor burns or patients with no other options for pain control.

Diagram # 3

Verbal Assessment Tool for Pediatric Pain.



Non-Verbal Pain Assessment Tool

**This is a behavioral pain assessment scale for use in children 2 months-7 years, or those unable to provide reports of pain. Instructions: Rate patient in each category, add together document total pain score.

Table # 10

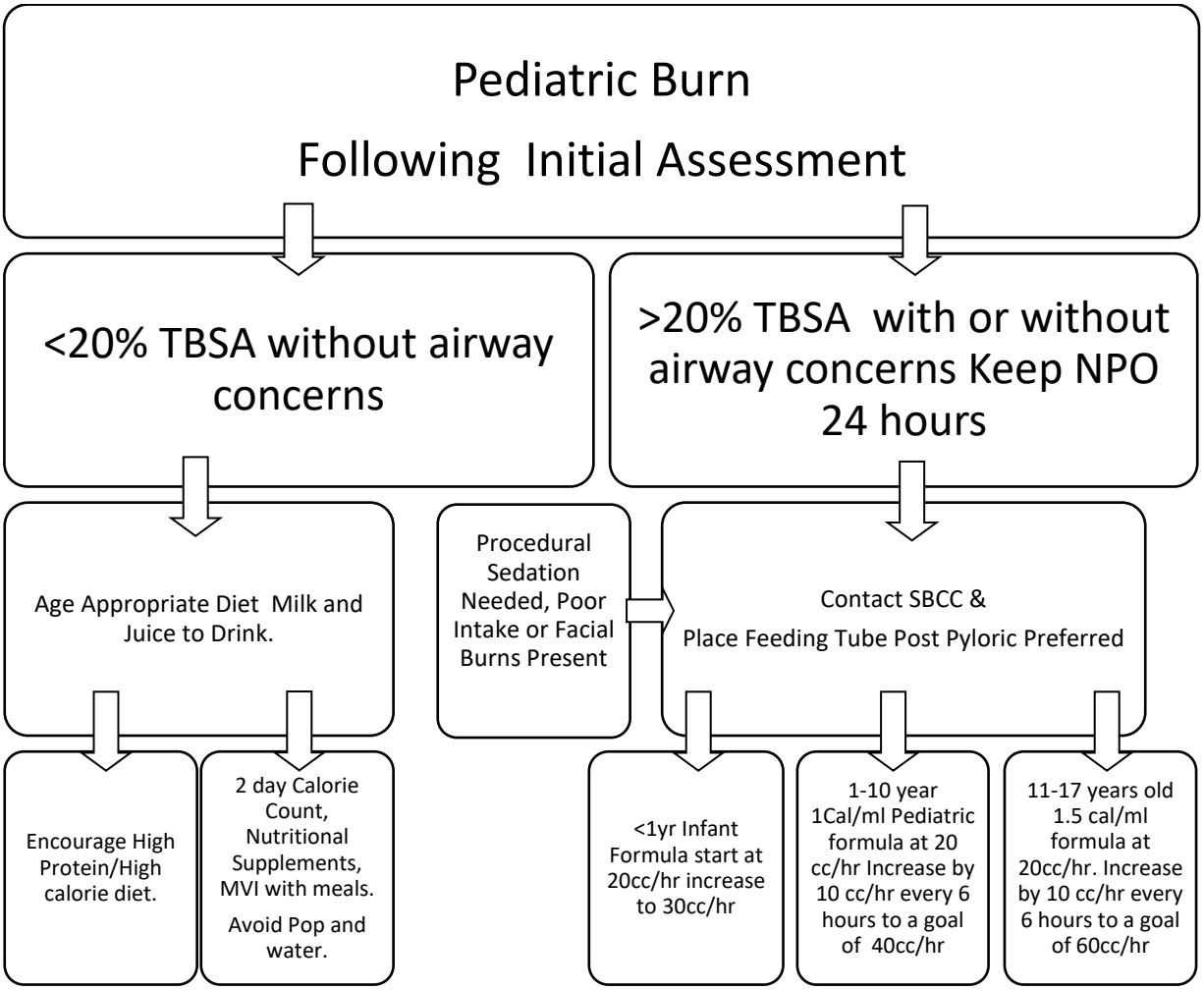
FLACC SCALE (FACE, LEGS, ACTIVITY, CRY, CONSOLABILITY)			
	0	1	2
FACE	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant frown, clenched jaw, quivering chin
LEGS	Normal position OR Relaxed	Uneasy, Restless, Tense	Kicking Or Legs drawn up
ACTIVITY	Lying quietly Normal position Moves easily	Squirming, Shifting back and forth, Tense	Arched, Rigid or Jerking
CRY	No cry (Awake or Asleep)	Moans or Whimpers Occasional complaint	Crying Steadily, Screams or Sobs, Frequent complaints
CONSOLABILITY	Content Relaxed	Reassured by occasional touching, hugging or talking, Distractible	Difficult to console or comfort

Nutrition

Nutrition in a pediatric patient should be considered early in the treatment phase. Place enteral feeding tube as early as possible in all patients with burns ≥ 20% TBSA. If none are available or if the patient is awake and alert and able to drink and eat encourage patient to do so.

***** It is important to keep the patient NPO (nothing by mouth) until assessments have been completed*****

Diagram # 4



- If patient has an NG/OG, check residuals Q 4 hr. If residuals are more than 3 times the hourly rate stop the tube feedings and notify physician
- Consult dietitian for appropriate formula

Table # 11

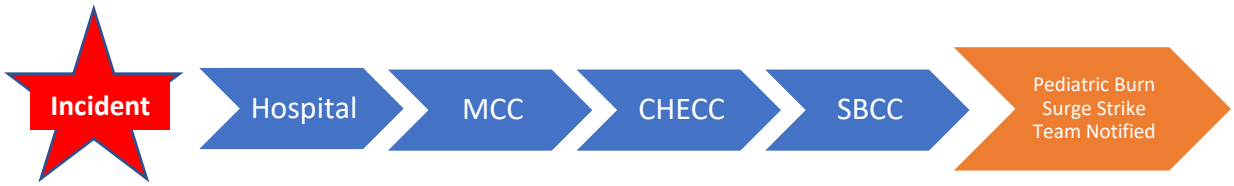
Nutritional Guidelines for Birth to 1 yr. old

Age	
Birth - 1 month	2-3 ounces (6-90 mL) per feeding breast or bottle every 2-3 hours
2-4 months	3-4 ounces (90-120 mL) per feeding every 3-4 hours
4-6 months	4-5 ounces (120-150 mL) per feeding, four or more time daily Begins baby food, usually rice cereal
6-8 months	6-8 ounces (180-240 mL) per feeding, four times daily Eats baby food such as rice cereal, fruits and vegetables
8-10 months	6 ounces (180 mL) per feeding, four times a day Soft finger foods
10-12 months	6-8 ounces (180-240mL) per feeding, four times a day Soft table foods, uses spoon and cup with lid
Formulas	Milk Based: Enfamil, Enfacare & Similac Soy Based: Prosobee & Isomil

Communication Activation Model

Diagram # 5

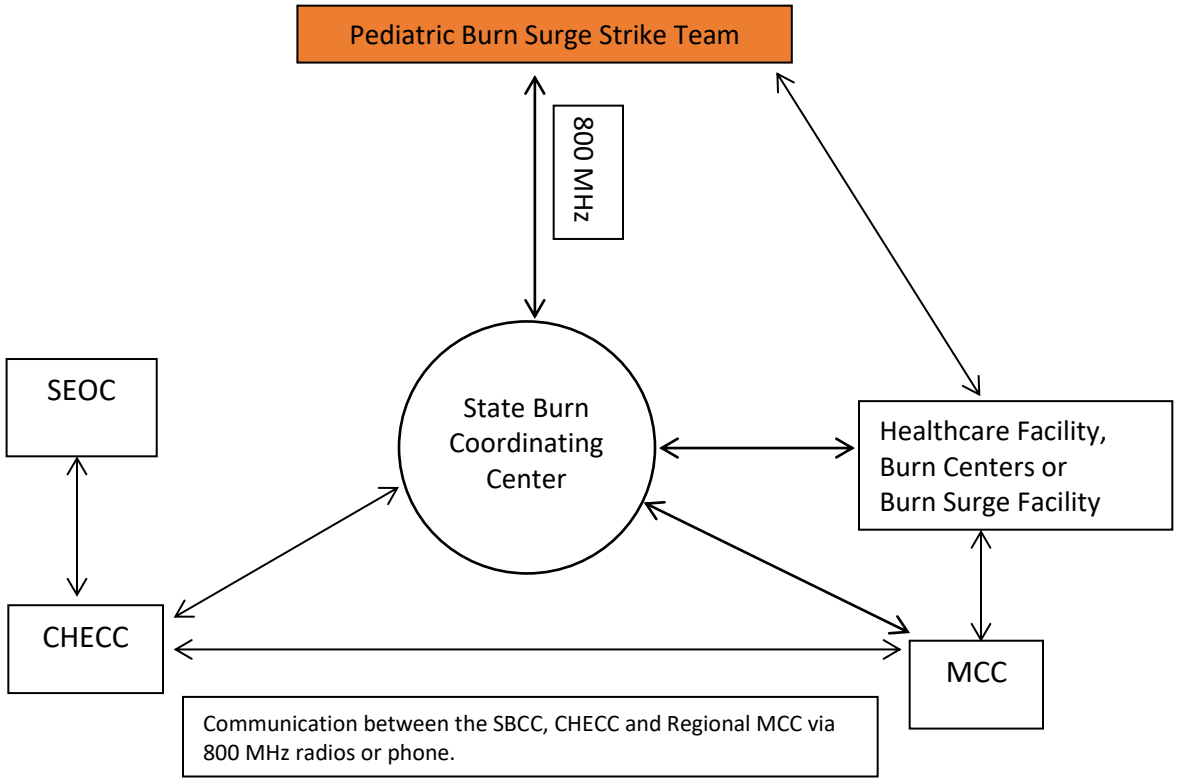
Initial Communication



Gathering incident specific information is critical to communication both vertically and horizontally with the agencies involved. For communication with the Pediatric Burn Surge Strike Team deployed to assist with pediatric patients, the SBCC will ask the Healthcare/Burn Surge Facility for Elements of Essential Information (EEI) (Appendix B – *The State of Michigan Burn Mass-Casualty Incident Surge Plan*). This will provide the Pediatric Burn Surge Strike Team with basic information regarding patient quantity and injuries. All air ambulance services have 800 MHz radios and OPHP 1 is the fallback frequency. Direct phone communications will also occur.

Diagram # 6

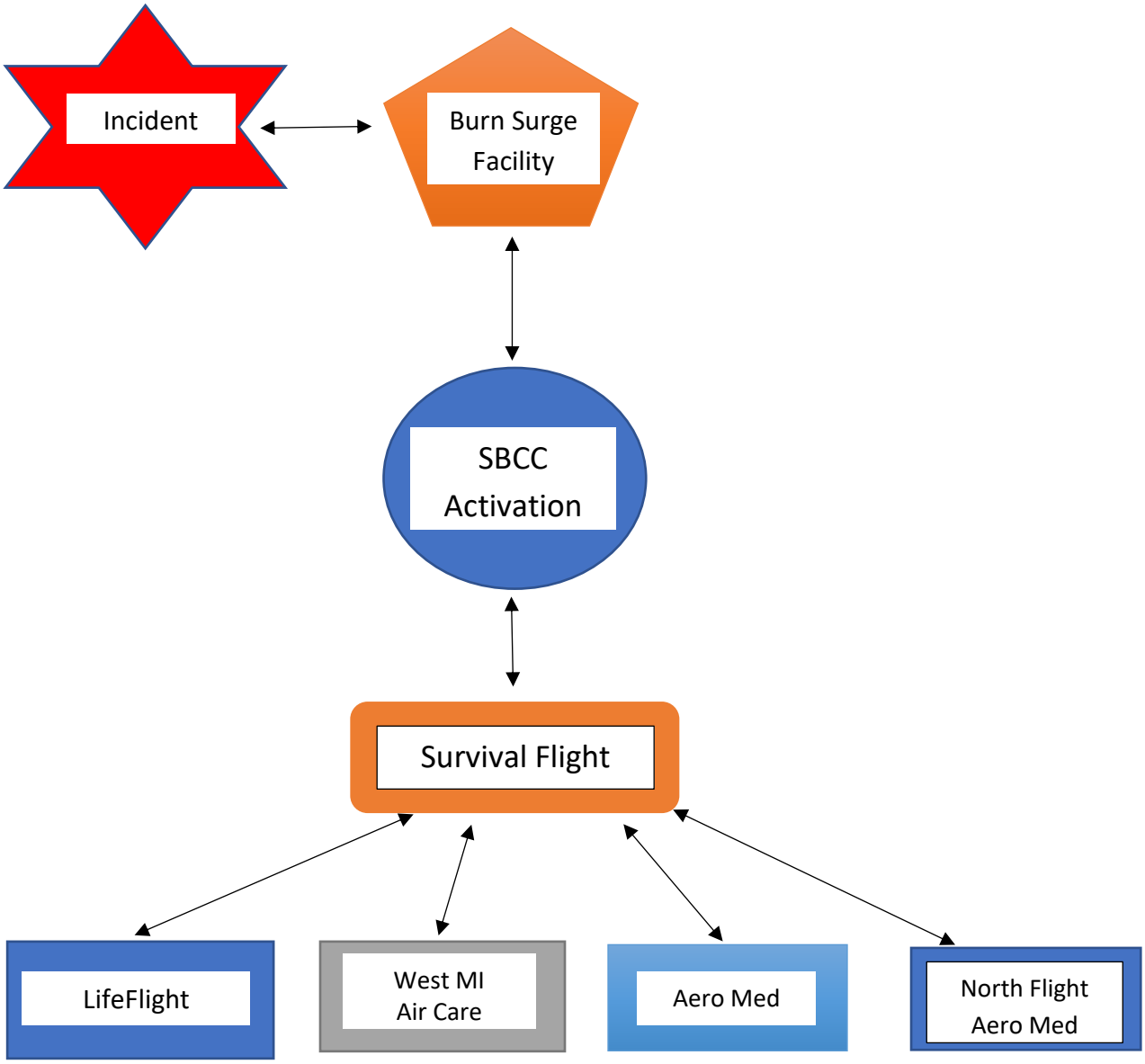
On-going Communication Incident



Special Event frequencies for the 800 MHz radios will be determined and provided by the CHECC. All air ambulance services have Special Event frequencies.

Diagram # 7

Air Ambulance Activation



With the activation of the SBCC, the Medical Director will contact Survival Flight dispatch. They in turn will notify the closest air ambulance service and put them on stand-by. The closest air service will be dispatched to the impacted hospital or burn surge facility to assist with stabilization of patients, transport of Burn Surge Strike Team members and then begin the transfer of the most critical patients to burn centers. Critical pediatric patients will be the first transferred out. Other air ambulance services could be activated to assist in the transfer of the most critical to burn centers.
All air ambulance services would be notified of the burn mass casualty incident for situational awareness. The next closest air ambulance would be placed on stand-by for dispatch to assist with patient transport. Close communication would need to take place between survival dispatch and the air ambulances in the air and landing. Outside landing zones may have to be set-up by trained local personnel for safety of the flight crews.

References

Pediatric Disaster CBRNE Incidents - Quick Medical Reference Guide. Developed by Region 2 South Healthcare Coalition in conjunction with the Michigan Department of Community Health (MDCH) Office of Public Health Preparedness (OPHP) utilizing the Department of Health and Human Services (HHS), Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program Cooperative Agreement Number U3REPO90218-01-00 funding.

University of Michigan – Department of Pharmacy Services; IV Guidelines for Brandon Newborn ICU: http://med.umich.edu/surgery/burn/BrandonIVDripGuide.pdf

University of Michigan – Department of Pharmacy Services; PICU IV Guidelines http://med.umich.edu/surgery/burn/PICU_IV_InfusionChart.pdf

Go-Bag Supply List

Table #12

Revised: April 10, 2021

Item	Each
Broselow tape	1
Resuscitation	
Foleys	
6 Fr.	4
8 Fr.	4
10 Fr.	4
OG/NGT tubes	
6 Fr.	4
8 Fr.	4
10 Fr.	4
IV catheters	
24 ga.	20
22 ga.	20
1 in. silk tape	4
Tegaderm 2 3/8 x 2 3/4	20
Intra-Osseseous EZ-IO	
Sets: 15 ga. x 15 mm	10
15 ga. x 25 mm	15
15 ga. x 45 mm	5
Driver for EZ-IO	1
Airway	
2.5 uncuffed ETT	4
3.0 uncuffed ETT	4
3.5 cuffed ETT	4
4.0 cuffed ETT	4
4.5 cuffed ETT	4
5.0 cuffed ETT	4
5.5 cuffed ETT	4
6.0 cuffed ETT	4
6.5 cuffed ETT	4
7.0 cuffed ETT	4
7.5 cuffed ETT	4
8.0 cuffed ETT	4
6 Fr. Stylet	7
10 Fr. Stylet	5
Capnometers: < 15 kg	12
>15 kg	12
Peep Valves	12
Pop-off valves	8

Item	Each
Adult Ambu bag	2
Pediatric Ambu bag	2
Pediatric Cric tray (3.5)	1
Neo trach (3.5) uncuffed	2
Peds cric tray	1
Peds trach (4) uncuffed	2
Introducer, perc trach	1
Resuscitation Masks	
Size 1 – neonatal	6
Size 2 – infant	6
Size 3 – toddler	6
Size 4 – child	6
Size 5 – small adult	6
Non-rebreather mask – peds	10
Twill tape/tie	1
Nasal Cannula	
Infant	10
Pediatric	10
Suction Catheters	
6 Fr.	10
8 Fr.	10
Laryngoscopes	
Laryngoscope handle – Med.	1
0 Miller blade	4
1 Miller blade	4
2 Miller blade	4
3 Miller blade	4
4 Miller blade	4
1 Macintosh blade	4
2 Macintosh blade	4
3 Macintosh blade	4
4 Macintosh blade	4
GlideScope Ranger	1
GlideScope Ranger: Baton 3-4	1
Includes 10 each 3 & 4 blades	
GlideScope Ranger: Baton 1-2	1
Includes 10 each 1 & 2 blades	

Acronyms

Acronym	Term
BMCI	Burn Mass Casualty Incident
BEPESoC	Bureau of Emergency Preparedness, EMS and Systems of Care
BSA	Body Surface Area
BSF	Burn Surge Facility
CHECC	Community Health Emergency Coordination Center
CO_2	Carbon dioxide
Cric	Cricothyrotomy
D5LR	Dextrose 5% Lactated Ringers
ETT	Endotracheal tube
F_iO_2	Fracture inspired oxygen
Fr.	French
ga.	gauge
GA	Gestational age
hr.	hour
IO	intraosseous
IVF	Intravenous fluid
IV	intravenous
kg	Kilograms
LR	Lactated Ringers
mcg	micrograms
mg	milligrams
mL	milliliter
mm	millimeter
NPO	Nothing per mouth
PEEP	Positive end expiratory pressure
PERC	Percutaneous
PIP	Peak inspiratory pressure
PO	by mouth
SBCC	State Burn Coordinating Center
TBSA	Total body surface area
trach	Tracheostomy tube
yr.	years

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