

# Pediatric Interfacility Transfer Guidelines



Office of Community Health Systems

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# Introduction

The Washington State Department of Health (DOH) trauma designation requirements specify that hospitals designated to provide trauma services must have transfer guidelines in place. In response to the many requests for a template or guideline, the Pediatric Technical Advisory Committee for Washington State developed this guideline for hospitals to improve their pediatric interfacility transfer process.

We developed the transfer guidelines according to published standards from national organizations and research from pediatric specialty providers across the nation. We also reviewed American Academy of Pediatrics' publications as well as the National Highway and Transportation Safety Administration (NHTSA) standards regarding mode of transport. These transfer guidelines include pediatric critical illness as well as pediatric trauma.

The following guidelines are not part of the Washington Administrative Code (WAC) but are a template that facilities may adopt to fulfill requirements for trauma designation or facilitate the development of appropriate pediatric interfacility transfer guidelines.

The Department of Health does not mandate Washington state designated trauma services to use these guidelines but offers them to assist trauma services in developing their guidelines. Facilities vary in size and available resources. We encourage you to adapt these guidelines to best benefit your facility and needs. The decision to use these guidelines in any situation always depends on the independent medical judgment of the treating provider.



## Pediatric Interfacility Transfer Guidelines for Trauma and Critical Illness

This document addresses the transfer of pediatric patients with traumatic injuries as well as non-traumatic illnesses. Washington has adopted three levels of pediatric trauma care to enhance the care of injured children across the state. The acutely injured child who does not require critical care management can be cared for in a level III pediatric trauma service. Only the critically injured child or a child whose level of care exceeds the local area capability should be transferred to a level I or II pediatric trauma service. Some level III pediatric trauma patients may be admitted to an adult ICU for close observation; however, if the patient starts to need ICU-level care, then per WAC 246-976-700(26)(m), the patient should be transferred to an appropriate level I or II pediatric trauma service.

In addition, pediatric patients with non-traumatic illnesses can receive care in regional facilities. Providers should transfer patients to a higher level of care when their medical or nursing care needs exceed what is available in their community.

The following guidelines include recommendations for providers about which critically injured or ill pediatric patients should be transferred and when to transfer them. Its purpose is to be a resource for hospitals in Washington.

The state trauma system considers patients 14 years or younger, pediatric patients. Many pediatric patients in their early teens may be the size of a small adult, prompting providers and surgeons to keep them in their local facility. We advise caution with this practice, as these patients still have the emotional and physical needs of a child rather than an adult. They need specialized resources, such as child life services, in addition to providers and ancillary staff trained in pediatric patient care and management.





## Pediatric Trauma Transfer Guidelines

### Physiologic Criteria:

1. Decreased or deteriorating neurologic status
2. Respiratory distress or failure
3. Endotracheal intubation or ventilatory support and children requiring anesthesia
4. Shock, compensated or uncompensated (tachycardia + poor perfusion = SHOCK)
5. Injuries requiring any blood transfusion
6. Suspected non-accidental trauma (NAT)
7. Children requiring any one of the following:
  - a. Invasive monitoring (arterial and/or central venous pressure)
  - b. Intracranial pressure monitoring
  - c. Vasoactive medications



### Anatomic Criteria:

1. Fractures and penetrating wounds to an extremity which may be complicated by neurovascular or compartment injury
2. Fracture of two or more long bones (femur, humerus, tibia/fibula)
3. Fracture of the axial skeleton
4. Suspected spinal cord injuries
5. Traumatic amputation of an extremity (including digits with potential for replantation)
6. Head injury with any of the following, either suspected or documented:
  - a. Cerebrospinal fluid leaks (basilar skull fractures)
  - b. Open head injuries (excluding simple scalp lacerations)
  - c. Depressed skull fractures
  - d. Decreased level of consciousness (GCS < 14)
  - e. Intracranial hemorrhage or contusion
  - f. Penetrating wounds to the head, neck, thorax, abdomen, or pelvis
  - g. Pelvic fracture
  - h. Significant blunt injury to the chest or abdomen
  - i. Degloving injuries, especially with possible tendon injuries



## American Burn Association Transfer Criteria

1. Partial thickness burns greater than 10 percent total body surface area (TBSA)
2. Burns that involve the face, head, neck, hands, feet, genitalia, perineum, or major joints
3. Third-degree (full thickness burns) in any age
4. Electrical burns, including lightning injury
5. Chemical burns
6. Inhalation injury
7. Burn injury with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality
8. Burn injury with concomitant (e.g., fractures) trauma
9. Burn injury in patients that require special social, emotional, and/or long-term rehabilitative intervention
10. Burned children in hospitals without qualified personnel or equipment for the care of children

## Other Trauma Criteria

1. Children requiring pediatric intensive care other than for close observation
2. Any child who may benefit from a consultation with, or transfer to, a Pediatric Trauma Center or Pediatric Intensive Care Unit

>90%

of pediatric burn ED patients meeting ABA burn transfer criteria are not transferred



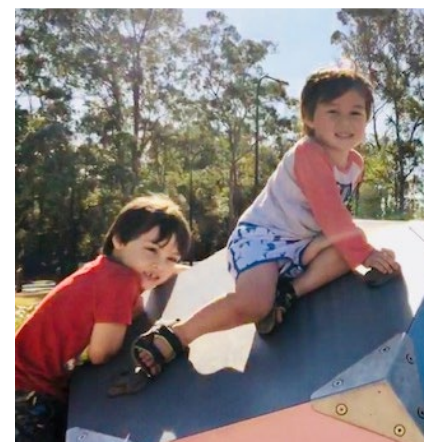
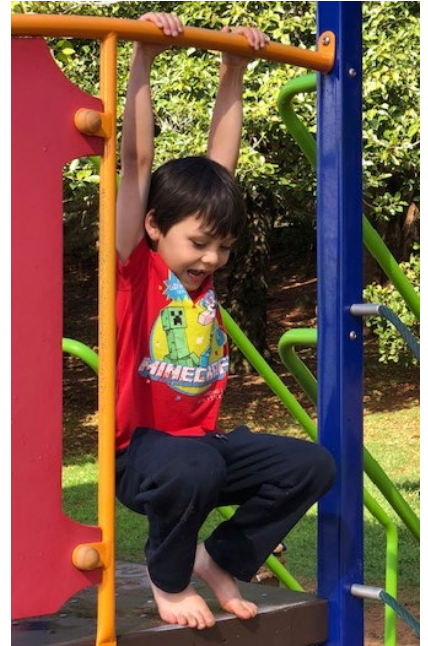
## Pediatric Medical Transfer Guidelines

### Physiologic Criteria:

1. Depressed or deteriorating neurologic status
2. Severe respiratory distress and/or respiratory failure
3. Children requiring endotracheal intubation or ventilatory support
4. Cardiac rhythm disturbances or known or suspected cardiac conditions (e.g., congenital heart defect)
5. Status post cardiopulmonary arrest
6. Heart failure
7. Shock not responding adequately to initial treatment
8. Suspected child abuse or severe neglect
9. Children requiring any one of the following:
  - a. Arterial, central venous, or pulmonary artery pressure monitoring
  - b. Intracranial pressure monitoring
  - c. Vasoactive medications
  - d. Treatment for severe hypo- or hyperthermia
  - e. Treatment for hepatic failure
  - f. Treatment for acute or chronic renal failure requiring urgent dialysis

### Other Criteria:

1. Near drowning with any history of loss of consciousness, unstable vital signs, or respiratory problems
2. Status epilepticus
3. Potentially dangerous envenomation
4. Potentially life-threatening ingestion of, or exposure to, a toxic substance
5. Severe electrolyte imbalances
6. Severe metabolic disturbances
7. Severe dehydration
8. Potentially life-threatening infections, including sepsis
1. Provider discretion in consultation with a pediatric specialist



## Transport Team and Method of Transport

### Decision:

A provider's decision to transfer a patient is based on the previously listed anatomic or physiologic criteria rendering the patient's care beyond the ability of the referring facility to provide adequately. Referring facilities need to have established policies and procedures for initiating the transfer (i.e., who talks to whom), gathering the required paperwork, informing the family, and giving them maps or directions to the receiving facility. The list of hospitals at the end of this document gives the phone number/s they want the referring facility to use to contact them for pediatric transfers (as of April 2022).

### Method:

The method of interfacility transport is dependent on many variables. Washington holds many geographic and weather challenges which will influence the referring provider's decision on how to transport the patient. **Transport by private vehicle is highly discouraged for sick or injured children.** Two areas to address in determining the method are the level of care required to appropriately care for the patient and general transport issues. For example, a specialty team such as a pediatric or neonatal transport team or a critical care flight or ground team has a broader scope of practice and more specialized knowledge base than a non-specialty ground transport paramedic. They also may have more specialty medications and equipment needed to care for the critically ill or injured child.

### Equipment:

Choosing the mode of transport can be challenging given our state's rural nature as well as weather and geographic obstacles. The Method of Transport section outlines what team configuration (i.e., BLS, ALS, or Critical Care/Specialty Team) can or should be utilized according to the level of care needed by the patient. At all times, the referring facility should be knowledgeable about the transport method's pediatric capabilities, especially regarding pediatric equipment onboard. If they do not have a specific item on board (e.g., pediatric nebulizer), then the referring facility must ensure the patient leaves with the needed equipment and that the transport providers are familiar with that piece of equipment and how to use it. All patients must be secured in a program-approved restraint device appropriate for patient size and condition.



## Communication:

1. Both the referring (sending) and receiving (accepting) facilities should have policies regarding hospital-to-hospital communication, including:
  - a. Whether a workup is required or not prior to transport (i.e., CT scans)
  - b. Helping the referral facility determine the mode of transport
  - c. Patient stabilization requirements for transport
  - d. Patient ETA to the receiving facility with updated patient status
  - d. Communication back to the receiving facility regarding:
    - Overall patient outcome
    - The ability to discuss any patient care specifics enables both facilities to optimize patient care for future transfers
2. Transfer back to the referring facility also needs to be discussed for those patients requiring long-term or chronic care post-injury or illness. Return transfer is encouraged if the referring facility can care for the pediatric patient in the inpatient or rehabilitation setting.





## The Method of Transport

The method of transport is dependent on the variables listed below. Air transport, either fixed wing (airplane) or rotary wing (helicopter), is typically utilized when speed is critical, long distances are involved, and/or a specialty team is required for patient care. However, using an ALS unit in some areas renders that area or island without an ALS unit for a prolonged period. Therefore, in this situation, a flight team may be utilized so the local community isn't endangered. For these guidelines, Critical Care Transport or CCT refers to both air (rotor and fixed wing) and ground teams.

The following factors should be considered when deciding which method of transport to use for the critically ill or injured child:

1. The availability of critical care or specialty care transport teams within a reasonable proximity
2. The modes of transportation or transport personnel available as options in the geographic area
3. The specific circumstances associated with the transport situation (inclement weather, major media event, etc.)
4. The anticipated response time of the most appropriate team or personnel
5. The established state, local, and individual transfer service standards, or requirements
6. The combined level of expertise and specific duties or responsibilities of the individual transport team members
7. The degree of supervision required by and available to the transporting team members
8. The complexity of the patient's condition
9. The anticipated degree of progression of the patient's illness or the injury prior to and during transport
10. The technology or special equipment to be used during transport (e.g., an isolette for newborns and infants)
11. The scope of practice of the various team members



## Transport Team Configuration: Patient Factors

The referring facility needs to determine the deterioration risk of the pediatric patient to decide on the crew composition, and ultimately, the method of transport. According to the NHTSA guidelines, the referring facilities should use the categories for risk. The desired team configuration is based on the NHTSA guidelines and adapted for pediatrics:

**Stable with no risk for deterioration** - Basic Life Support (BLS) or Intermediate Life Support (ILS)

Oxygen, monitoring of vital signs, saline lock: requires basic emergency medical care such as basic life support services.

**Stable with low risk of deterioration** - Advanced Life Support (ALS)

Running IV, some IV medications including pain medications, pulse oximetry, increased need for assessment and interpretation skills: requires advanced care such as an advanced life support service or an IV qualified service.

**Stable with medium risk of deterioration** - Advanced Life Support

(ALS), preferably Critical Care Transport (CCT) - air or ground team or Specialty Pediatric Transport Team

3-5 lead EKG monitoring, basic cardiac medications, e.g., heparin or nitroglycerin: requires advanced care such as an advanced life support service, CCT, or specialty pediatric transport team should be given consideration based on the patient's underlying medical condition and reason for transfer.

**Stable with a high risk of deterioration** - Critical Care Transport (CCT) or Specialty Pediatric Transport Team

Patients requiring advanced airway but already secured, intubated, on a ventilator, patients on multiple vasoactive medication drips or whose condition has been initially stabilized, but have a likelihood of deterioration based on a knowledgeable provider's assessment regarding specific illness or injury: requires advanced care such as a critical care team (CCT); use of a specialty pediatric transport team is encouraged.

**Unstable** - Critical Care Transport (CCT) with a Specialty Pediatric Transport Team highly encouraged

Any patient who cannot be stabilized at the transferring facility, who is deteriorating or likely to deteriorate, such as patients who require invasive monitoring, balloon pump, who are post-resuscitation, or who have sustained multiple traumas: requires advanced care such as a critical care team (CCT); use of a specialty pediatric transport team is encouraged.



## State of Washington Designated Pediatric Trauma Centers and Pediatric Critical Care Centers

### Designated Level 1 Pediatric Trauma and Burn Center:

#### **Harborview Medical Center**

Seattle, Washington

**1-888-731-4791** (Transfer Center)

### Designated Level II Pediatric Trauma Centers:

#### **Mary Bridge Children's Hospital**

Tacoma, Washington

**855-647-1010** (Transfer Center)

#### **Sacred Heart Children's Hospital**

Spokane, Washington

**509-474-2000** (Transfer Center)

### Designated Level 3 Pediatric Trauma Centers:

#### **Central Washington Hospital**

Wenatchee, Washington

**855-667-2294** (Confluence Health Transfer Center)

#### **Providence Everett Medical Center**

Everett, Washington

**425-261-4000** (Transfer Center)

#### **Providence St. Mary Medical Center**

Walla Walla, Washington

**509-897-8767** (Transfer Center)

#### **Yakima Valley Memorial Hospital**

Yakima, Washington

**509-961-9015** (Transfer Center)

### Pediatric Critical Care Unit (Non-Trauma):

#### **Seattle Children's Hospital**

Seattle, Washington

**206-987-5437** (Transfer Center)

#### **Swedish Medical Center - First Hill**

Seattle, Washington

**866-470-4233** (Transfer Center)



## State of Oregon Designated Pediatric Trauma Centers and Pediatric Critical Care Centers

### **Doernbecher Children's Hospital - Level I Trauma**

**Center** Portland, Oregon

**1-800-648-6478** (Transfer Center)

**1-888-667-2632** (1-888-66PANDA - PANDA Transport)

**1-888-346-0644** (Advice Line)

### **Randall Children's Hospital - Legacy Emanuel PICU**

Portland, Oregon

**1-800-500-9111** (One Call Center-Transfer Center)



## Template for an Interfacility Transfer Checklist

**Items to send with patient and transfer team:**

- Two (2) Face Sheets (demographics)
- Emergency Department Records including vital signs
- Lab Tests and Results
- X-rays, Ultrasounds, CT scans, etc. (Forward electronically via VPN if available, otherwise digital copies)
- Copy of Radiology report (if available)
- History and Physical
- EKG copy (if applicable)
- Medication Record
- Copy of EMS Run Sheet (if applicable and available)
- For Inpatients, add last 24 hours of VS, I&O's, and discharge summary
- Provider Signed Necessity to Transfer/EMTALA Form
- Signed Parental Informed Consent

Patient Name: \_\_\_\_\_ Age: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

Transfer to: \_\_\_\_\_

Accepting Physician: \_\_\_\_\_

Transferring Physician: \_\_\_\_\_

Transferring Hospital: \_\_\_\_\_

Transfer Level of Care	Method of Transfer	Family Considerations
<ul style="list-style-type: none"> <li><input type="checkbox"/> Basic Life Support</li> <li><input type="checkbox"/> Advanced Life Support</li> <li><input type="checkbox"/> Critical Care Team</li> <li><input type="checkbox"/> Pediatric Transport Team</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Ground BLS ambulance</li> <li><input type="checkbox"/> Medic or ALS Unit Ground</li> <li><input type="checkbox"/> CCT Unit Flight/Specialty Team</li> <li><input type="checkbox"/> Fixed Wing (Airplane)</li> <li><input type="checkbox"/> Rotor Wing (Helicopter)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Directions</li> <li><input type="checkbox"/> Receiving Unit Phone Number</li> <li><input type="checkbox"/> Patient Belongings</li> </ul>

## Reference/Resources

[American Burn Association; Advanced Burn Life Support Course: Provider Manual 2018 Update.](#)

Field Guide for Air and Ground Transport of Neonatal and Pediatric Patients: A Quick Reference for Transport Teams. Edited by Keith Meyer, MD, FAAP; Caraciolo J. Fernandes, MD, FAAP; MD MEd Hamilton

P. Schwartz, FAAP, FACEP, American Academy of Pediatrics Section on Transport Medicine. American Academy of Pediatrics Section on Transport Medicine; October 2018.

[Guide for Interfacility Patient Transfer, National Highway and Traffic Safety Administration: April 2006.](#)

[Inter Facility Tool Kit for the Pediatric Patient; Society of Trauma Nurses; reviewed February 2021.](#)

Johnson SA, Shi, Groner JI, et al. Inter-facility transfer of pediatric burn patients from U.S. Emergency Departments. *Burns*. 2016;42(7):1413-1422. doi:10.1016/j.burns.2016.06.024

[Oregon Pediatric Interfacility Transfer Guideline Toolkit; Oregon Emergency Medical Services for Children; 2014](#)

