



Maryland Reference for Safe Transport of Children in Ambulances





The Maryland EMS for Children's Program designed this card as a reference tool for EMS providers when transporting pediatric patients in ambulances. It is based on the most up to date recommendations from NHTSA and highlights several different devices that EMS providers may encounter in the field.

Regardless of the device utilized by the EMS providers, there are some universal guidelines when transporting pediatric patients:

- Do drive cautiously at safe speeds observing traffic laws;
- Do tightly secure all monitoring devices and other equipment;
- Do ensure seat belt and restraints are used by ALL ambulance occupants all of the time;
- **Do NOT have the child/infant held in the parent, caregiver, or EMT's arms or lap during transport;**
- Do transport children who are not patients, properly restrained, in an alternate passenger vehicle whenever possible;
- Do maintain and clean neonatal and child restraint seats and equipment per manufacturer's instructions;
- Do follow the current pediatric standard of care for the ill and injured infant, child and adolescent;
- Do utilize principles of emergency medical dispatch to determine resources and response modality;
- Do utilize methods to reduce the unnecessary use of emergency lights and sirens;
- Do require driver screening and training specific to ground ambulance transport;
- Do require the DOT NHTSA Emergency Vehicle Operating Course (EVOC), National Standard Curriculum, or its equivalent.

Disclaimer

If trade names, manufacturers' names, or specific products are mentioned, it is because they are considered essential to the purpose of this reference card and should not be construed as an endorsement. MIEMSS does not endorse products or manufacturers. The information enclosed in the Maryland Reference for the Safe Transport of Children in Ambulances is not intended to replace the guidelines and installation instructions available from devices' manufacturers.



Pedi-Mate[®]

(Designed for children from 10-40 lbs. (4.5-18 kg))



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Pedi-Mate®

(Designed for children from 10–40 lbs. (4.5–18 kg))

Attachment to the Ambulance Cot

1. Raise the stretcher's backrest to an angle between 15 and 45 degrees.
2. Remove the harness restraints attached to the cot or secure them behind the backrest of the stretcher. If secured behind the backrest, ensure harness is buckled and does not impede the ability to lower the backrest.
3. Unroll the device and extend the backrest straps and mainframe straps.
4. Position device on the stretcher with the black backrest strap at the point where the patient's shoulders are anticipated to rest.
5. Fasten the black backrest straps around the stretcher's backrest.
6. Fasten the mainframe straps around the stretcher's mainframe.
7. Ensure tightness of each strap (mainframe and backrest) while maintaining device in center of stretcher.

Securing the Patient

1. Unbuckle straps in preparation for the patient.
2. Position patient in center of device with patient's back flat against the back of the device and bottom at cot and device's fold.
3. Thread patient's arms through the shoulder straps.
4. Pull the crotch strap buckle up between the patient's legs.
5. Fasten the shoulder straps into the crotch strap buckle.
6. Thread the shoulder strap on the patient's left side through the chest clip and slide the chest clip to patient's armpit level.
7. To snug the shoulder/torso straps, refer to illustration and use the following procedure.



- a. Snug the shoulder strap A.
- b. Repeat with the other shoulder strap.
- c. Snug the torso strap.
- d. Repeat with the other torso strap.
- e. Snug the crotch strap by pulling on the free end.

Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.





SafeGuard Transport[®]

(Designed for children from 22-100 lbs.
(10-45.5 kg) who are at least 1 year of age)





SafeGuard Transport[®]

(Designed for children from 22-100 lbs. (10-45.5 kg) who are at least 1 year of age)

Attachment to the Ambulance Cot

1. Elevate the cot backrest to the fully upright position.
2. Remove the harness restraints attached to the cot or secure them behind the backrest of the stretcher. If secured behind the backrest, ensure harness is buckled and does not impede the ability to lower the backrest.
3. Position device on ambulance cot.
4. Fasten the tan upper cot attachments around the back of the cot backrest.
5. Fasten black lower cot attachments around the cot main frame.
6. Ensure tightness of all three straps (tan and 2 black) while maintaining device in center of stretcher.

Securing the Patient

1. Lift harness release lever and pull on shoulder straps to loosen.
2. Lift buckle strap lever and pull on crotch strap buckle to loosen.
3. Unbuckle straps in preparation for the patient.
4. Position patient in center of device with patient's back flat against the back of the device and bottom at cot and device's fold.
5. Thread patient's arms through the shoulder straps.
6. Fasten the shoulder straps into the crotch strap buckle.
7. Pull on buckle strap to tighten ensuring buckle height is at top of patient's legs.
8. Pull on harness strap to tighten securely around patient's shoulders and hips.
9. Fasten shoulder harness chest clips and slide to the patient's armpit level.
10. Fasten stretcher waist strap and position over patient's thighs.

Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.

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Traditional Car Seat



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Traditional Car Seat

(Refer to weight and height parameters on the manufacturer's car seat label)

Attachment to the Ambulance Cot

1. Elevate the cot backrest to a 45 degree angle.
2. Remove the shoulder harness restraints attached to the cot or secure them behind the backrest of the stretcher.
3. Prior to positioning car seat on ambulance cot, ensure car seat's shoulder straps come from slot closest to patient's shoulder height. It may be difficult to adjust the seat's shoulder straps once placed on the stretcher.
4. Position car seat on ambulance cot. Adjust cot backrest to be flush with the back of the car seat.
5. Thread stretcher chest strap through the forward facing belt path and buckle.
6. Thread stretcher leg strap through the rear facing belt path and buckle.
7. Ensure tightness of both straps while maintaining device in center of stretcher. Car seat should not move more than 1" in any direction.



Securing the Patient

1. Unbuckle straps in preparation for the patient.
2. Position the patient in center of device with patient's back flat against the back of the device.
3. Thread patient's arms through the shoulder straps.
4. Fasten the shoulder straps into the crotch strap buckle.
5. Fasten chest clip and slide to the patient's armpit level.
6. Pull harness straps snug on patient until no excess strap can be pinched.

Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.



AngelRide™ Infant Car Bed

(For children less than 9 lbs. (4.1 kg)
and less than 21.5" height)



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AngelRide™ Infant Car Bed

(For children less than 9 lbs. (4.1 kg) and less than 21.5 " height)

Attachment to the Ambulance Cot

1. Elevate the cot backrest to the fully upright position.
2. Remove the shoulder harness restraints attached to the cot or secure them behind the backrest of the stretcher.
3. Position car bed on ambulance cot with the bed perpendicular to normal patient direction and labels facing out.
4. Thread stretcher chest strap through the 3 belt guides on the front and corners of the bed, and then buckle the stretcher strap and tighten.
5. Thread the two gray rear straps around each side of the main frame of the cot backrest and tighten.
6. Ensure tightness of all straps while maintaining device in center of stretcher. Car bed should not move more than 1" in any direction.

Securing the Patient

1. Unbuckle straps in preparation for the patient.
2. Position patient in center of device with the patient's back flat against the bottom of the device.* [If medically necessary, patient may be positioned prone or on right side. See AngelRide™ manual for special instructions.]
3. Bring crotch harness strap and buckle up through patient's legs, lengthening harness by squeezing belt adjuster and pulling on buckle.
4. Place shoulder straps over patient's shoulders and buckle into the crotch strap buckle.
5. Pull on harness adjuster to snugly tighten the straps until there is no slack.



Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.

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Dream Ride Infant Car Bed

(For children 5-20 lbs. (2.3-9 kg) and 19-26" height)



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Dream Ride Infant Car Bed

(For children 5-20 lbs. (2.3-9 kg) and 19-26 " height)

Attachment to the Ambulance Cot

1. Elevate the cot backrest to the fully upright position.
2. Remove the shoulder harness restraints attached to the cot or secure them behind the backrest of the stretcher.
3. Prior to positioning car bed on ambulance cot, ensure car bed's shoulder straps come from slot closest to patient's shoulder height. It may be difficult to adjust the bed's shoulder straps once placed on the stretcher
4. Position car bed on ambulance cot with bed perpendicular to normal patient direction.
5. Thread stretcher chest strap through two belt loops and buckle.
6. Thread stretcher leg strap through two belt loops and buckle.
7. Ensure tightness of both straps while maintaining car bed in center of stretcher. Car bed should not move more than 1" in any direction.



Securing the Patient

1. In preparation for the patient, unbuckle straps.
2. Position patient in center of car bed with patient's back flat against the bottom of the device.
3. Position harness straps over patient's shoulders and the crotch strap between the legs. The buckle should lay at mid-tummy and the harness plates should reach the buckle. As needed, adjust crotch straps (under car bed) and/or harness straps (outside of car bed at the head of bed).
4. Fasten the shoulder straps into the crotch strap buckle.
5. Tighten the harness snugly until there is no slack and strap lies in straight line without pushing into the patient.

ALERT: Providers will need to use a second set of belt loops for the Dream Ride to be able to correctly install the car bed on the stretcher. When initially purchased, the device only comes with a single set of belt loops.

Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.





Radian® R120





Radian® R120



(Refer to weight and height parameters on the manufacturer's car seat label)

Attachment to the Ambulance Cot

1. Elevate the cot backrest to a 45 degree angle.
2. Remove the shoulder harness restraints attached to the cot or secure them behind the backrest of the stretcher.
3. Prior to positioning car seat on ambulance cot, ensure car seat's shoulder straps come from slot closest to patient's shoulder height. It may be difficult to adjust the seat's shoulder straps once placed on the stretcher.
4. If not already in place, attach rear-facing foot base onto bottom of device and lock it by sliding metal tab.
5. Position car seat on ambulance cot. Adjust cot backrest to be flush with the back of the car seat.
6. Thread stretcher chest strap through the forward facing belt path and buckle.
7. Thread stretcher leg strap through the rear facing belt path and buckle.
8. Ensure tightness of both straps while maintaining device in center of stretcher. Car seat should not move more than 1" in any direction.



Securing the Patient

1. Unbuckle straps in preparation for the patient.
2. Position patient in center of device with patient's back flat against the back of the device.
3. Thread patient's arms through the shoulder straps.
4. Fasten the shoulder straps into the crotch strap buckle.
5. Fasten chest clip and slide to the patient's armpit level.
6. Tighten the harness snugly on the patient until there is no slack in straps.

Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.

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Integrated Captain's Seat



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Integrated Captain's Seat

Installation Information

Designed for the UNINJURED child. Most seats are designed for children between 20-50 lbs. (9.1–22.7 kg) and between 28-47 inches tall. Child must be capable of sitting upright alone.

NOT to be used by children less than 1 year of age or do not meet weight/height requirements.



Steps to Prepare Seat and Secure the Patient:

1. Pull down adult back panel to expose the child safety seat.
2. Unbuckle straps in preparation for the patient.
3. Position patient in center of device with patient's back flat against the back of the device.
4. Thread patient's arms through the shoulder straps.
5. Fasten the shoulder straps into the crotch strap buckle.
6. Fasten shoulder harness chest clips and slide to the patient's armpit level.

Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.

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Guardian Safety Seat

Guardian Safety Seat

(Designed for children from 23 to 85 lbs.
(10.5 to 38.6 kg))

Steps to Prepare Seat and Secure the Patient:

1. Pull down adult back panel to expose the child safety seat.
2. Unbuckle straps in preparation for the patient.
3. Position patient in center of device with the patient's back flat against the back of the device.
4. Thread patient's arms through the shoulder straps.
5. Fasten the shoulder straps into the crotch strap buckle.
6. Fasten shoulder harness chest clips and slide to the patient's armpit level.
7. Tighten shoulder harness straps snugly on the patient until no excess strap can be pinched.
8. Adjust yellow clips so shoulder harness straps rest snugly at the top of the patient's shoulders.



Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.

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Guardian Safety Seat

Guardian Safety Seat

(Designed for infants from 5 to 22 lbs. (2.3 to 10 kg))

Steps to Prepare Seat and Secure the Patient:

1. Pull down adult back panel to expose the child safety seat.
2. Unbuckle child safety seat straps, secure in arm rest slots and pull down child back panel.
3. Release and remove seat cushion assembly. Store alongside seat in seat retaining holster and secure with safety strap.
4. Release yellow interlock safety bar and deploy infant seat. Ensure seat locks into place.
5. Unbuckle straps in preparation for the patient.
6. Position patient in center of device with patient's back flat against the back of the device.
7. Thread patient's arms through the shoulder straps.
8. Fasten the shoulder straps into the crotch strap buckle.
9. Fasten chest clip and slide to the patient's armpit level.
10. Pull the adjustment strap to adjust shoulder harness straps height on the patient.
11. Ensure the shoulder harness straps are snug on patient and no excess strap can be pinched.



Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.



Stretcher



Securing the Patient

1. Unbuckle straps in preparation for the patient.
2. Position patient in center of device with patient's back flat against the back of the device.
3. Fasten and tighten the stretcher shoulder harnesses and chest strap.
4. Fasten and tighten the stretcher waist strap.
5. Fasten and tighten the stretcher leg strap.



Please refer to the manufacturer's guidelines for complete installation instructions and additional information on product storage and maintenance.

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**For questions or additional information, please contact
the Maryland EMSC Program Office at 410-706-1758
or pepp@miemss.org**

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