



# EVAC-U-SPLINT<sup>®</sup> Pediatric Mattress

## APPLICATION GUIDELINES

### Models PD 3000, PD 1500 and PD1000 Application Guidelines specific to the Pediatric Mattress

#### INTRODUCTION

*The Evac-U-Splint<sup>®</sup> Pediatric Mattress operates in the same manner as the full-size Evac-U-Splint<sup>®</sup> Mattress, but there are a few modifications that you should be familiar with when using the pediatric vacuum mattress.*

**Strap Design** – The straps on the pediatric mattress come straight across the patient and do not zig-zag down the patient. This configuration enables the straps to come closer together when fastened allowing very small children to be immobilized effectively in the vacuum mattress. It also allows an individual strap to be unfastened while keeping the other straps fastened. This could be beneficial for physicians that need to examine a particular area of the child while still keeping the child securely immobilized.

**Valve** – There is one valve at the foot-end of the pediatric mattress. The Evac-U-Splint<sup>®</sup> Pediatric Mattress can be evacuated with a manual vacuum pump, or with a wall-mounted or portable suction unit.

**Handles** – There are four handles appropriately positioned for easy lifting of an immobilized child. The pediatric mattress can be lifted from the sides or from the ends. It is suggested to lift from the sides whenever possible as this distributes the patient's weight evenly among the two rescuers who are lifting the patient.

**Positioning of the Patient** – The injured child should be logrolled or lifted onto the vacuum mattress in accordance with the procedures established by **your EMS organization's medical director**. Because of the anatomical difference between adults and children, the child's torso usually needs to be elevated so that their cervical spine remains in neutral alignment. This can be accomplished easily with the vacuum mattress by following these steps: 1) Distribute the beads evenly throughout the length of the mattress. 2) Place the child on the mattress and check to see if the patient is in neutral alignment. 3) If the patient's head is flexed, simply make a slight depression under the occipital region of the child's head. The amount of depression can easily be changed depending on the size of the child's head in relation to their body. This helps place the child in neutral alignment and does not require

the child to be repositioned once they are placed on the surface of the pediatric mattress.

**IMPORTANT: All immobilization procedures should be in accordance with your local medical protocols and approved by your medical director.**

Once the child is properly positioned, the straps can be secured and the mattress evacuated. Care should be taken to minimize any movement of the patient during the application and securement of the vacuum mattress. Use of a rigid cervical collar should be a decision made by your local medical director. Medical grade adhesive tape, either 1" or 2" in width can be used to secure the forehead of the patient in the vacuum mattress. In addition, some children's hospitals have found that applying a 1" wide piece of tape just under the patient's nose is an excellent method for stabilizing a child's head. **Consult your medical director if questions arise as to the recommended immobilization procedures for your area.**

**Cleaning** – The Evac-U-Splint<sup>®</sup> Pediatric Mattress can be cleaned in the same manner as the adult mattress as outlined in the accompanying instructions.

**Storage** – Always inspect the product for damage prior to storing it. This will help ensure that the Evac-U-Splint<sup>®</sup> Pediatric Mattress is always ready to use under emergency conditions. The mattress should be stored in an area that is above freezing (0°C/32°F). The mattress can be used in environments below freezing, down to -30°F(-35°C), **but it should not be stored in an area where the temperature is below freezing.**

**CAUTION: Do not store the mattress in an area where the temperature is below freezing. The mattress will function at temperatures as low as -30°F (-35°C), but SHOULD NOT be stored at these extreme temperatures. If there is any doubt, bring the product to a temperature that is above freezing before using it in the field.**

Should you have any specific questions about the design, application or maintenance of this product, please contact us at the numbers listed below.



**HARTWELL MEDICAL**

6352 Corte del Abeto, Suite J • Carlsbad, CA 92009-1408  
800-633-5900 • 760-438-5500 • Fax 760-438-2783  
www.HartwellMedical.com

Rev. 01/04