



Optimal Support for  
Pediatric Resuscitation

# Because Children Are Not Just Little Adults

Too often, clinicians who treat children need to compromise and adapt devices designed for adults because there just isn't a pediatric version available. That is not the case with the ZOLL® R Series®, which has unique pediatric capability built into the defibrillator to optimize resuscitation of children. With smart, simple, and safe pediatric support, whether you need a solution for a single pediatric department or an entire pediatric hospital, the ZOLL R Series offers the most extensive pediatric capabilities available in a professional defibrillator.

*The pediatric electrodes can be used for monitoring, pacing, defibrillation, cardioversion, and CPR.*



## R Series Supports Pediatric Resuscitation

At ZOLL, we recognize that the resuscitation needs of children are different from adults and have provided a range of capabilities to support the special needs of the youngest patients.



## CPR Support Optimizes Perfusion and Reduces Interruptions

With the vast majority of pediatric arrests due to respiratory failure, the importance of high-quality CPR cannot be minimized. That's why the R Series is the first device to provide a pediatric electrode with a built-in CPR sensor. It is difficult to judge how hard one is pushing when performing CPR on a child, so the CPR Dashboard™ reports the actual depth and rate of compressions delivered. A CPR timer gauges the CPR periods for optimal ventilation, a metronome activates during manual mode when the rate falls below 100 compressions per minute, and an idle timer keeps staff aware of interruptions that compromise perfusion. All of the CPR information is contained in a single location at the top of the screen for rapid assessment.

See-Thru CPR® is a proprietary filter that allows clinicians to see if an organized rhythm is developing during CPR, helping to reduce the duration of interruptions to perfusion and speeding time to shock when indicated.



## Pediatric AED Algorithm Adjusts for Pediatric Rhythms

In the event of an arrhythmic arrest, as soon as the pediatric electrodes are placed, the R Series automatically adjusts its AED analysis algorithm to pediatric parameters in order to reduce the likelihood that a compensating rhythm will be terminated, enhancing the likelihood that unique pediatric ECG morphology will be identified when a shock or cardioversion is indicated.

## Constant Current Pacing for Bradycardia

ZOLL's constant current pacer has been proven to deliver more capture with less current than competing devices, ensuring support for the bradycardia often seen in children in distress<sup>1</sup>.

## Optional Monitoring Devices Have Pediatric Sensors

Neonatal and pediatric cuffs for non-invasive blood pressure measurement and infant and pediatric SpO<sub>2</sub> sensors provide important monitoring information for evaluating potential patient deterioration, they can be equally useful during transport or resuscitation. Optional mainstream EtCO<sub>2</sub> monitoring using the Respirationics Capnostat 5 Sensor with pediatric airway adapters help confirm and monitor proper endotracheal tube placement and alerts to any potential dislodgement. It also provides valuable information on the progress of resuscitation.





## Focus on Simplicity Minimizes Errors and Confusion

The R Series keeps things simple for clinicians. The pediatric paddles are stored inside the adult paddles. And the R Series uses the same OneStep® cable to connect both adult and pediatric electrodes as well as internal spoons.

### Safe Operation Is a Priority

When the pediatric electrodes are attached to the R Series, the shock energy is automatically lowered to a **starting dose of 50 joules**. For units

like the NICU, where even 50

joules may be too high, the R series can be configured to automatically decrement to whatever dose is desired, **even as low as 1 joule**. By automatically decreasing the starting dose, the R Series, minimizes the chance of incorrect dosing. This is different from other devices that attenuate the energy by adding resistance to the circuit, which impacts impedance measurement and reports inaccurate dosage.



### Automatic Testing Assures Defibrillator Readiness

Pediatric resuscitation is infrequent, but devices must always be ready. The R Series automatically performs a daily 100-point self test, with the electrodes attached. The test will even alert to an expired electrode. If the unit is compromised, the cause is displayed on the screen. If desired, the results of the self-test can be wirelessly transmitted to clinical engineering to assist in troubleshooting.

Don't Compromise When It Comes to Pediatrics...Rely on ZOLL

<sup>1</sup>ZOLL PM, et al. *Circulation*. May;71(5):937-44.

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