

 **AutoPulse**<sup>®</sup>

Consistent compressions.  
No interruptions.



**ZOLL**<sup>®</sup>  
Advancing Resuscitation. Today.<sup>™</sup>



# Improved blood flow is within reach.

For victims of SCA, only one thing is certain – chest compressions will be required. Yet, manual compressions – even when they are done well – only provide 10 - 20% of normal blood flow to the heart and 30 - 40% to the brain.<sup>1</sup>

Now, there's an alternative. The only device of its kind, the ZOLL® AutoPulse® is a revolutionary non-invasive cardiac support pump that moves more blood,<sup>2,3,4</sup> more consistently than is possible with human hands. Easy to use and battery operated, its load-distributing LifeBand® squeezes the entire chest. As a result, victims receive consistent, high-quality compressions that deliver improved blood flow.

AutoPulse also minimizes no-flow time. It allows rescuers to provide compressions while performing other life-saving activities, or while transporting a victim down the stairs or in the back of a moving ambulance. In doing so, it eliminates the interruptions that can cause coronary perfusion pressures to fall.

AutoPulse is just one of a full line of integrated resuscitation solutions designed to help rescuers improve practices and save more lives. For more information, call 800-804-4356 or visit [www.zoll.com](http://www.zoll.com).

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**88% improvement in survival  
to hospital admission.<sup>5</sup>**

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**Interruptions in chest compressions  
decrease rates of survival  
from cardiac arrest.<sup>6</sup>**

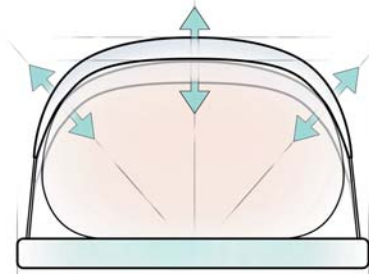
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**33% improvement in  
coronary perfusion pressure.<sup>4</sup>**

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**Load-distributing technology.<sup>7</sup>**

Load-distributing LifeBand® squeezes the entire chest and delivers consistent, high-quality compressions. It also allows full decompression for maximum coronary perfusion.

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**235% improvement in  
survival to discharge.<sup>5</sup>**

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**Evidence supporting  
AutoPulse benefits**

Casner M et al. The impact of a new CPR assist device on rate of return of spontaneous circulation in out-of-hospital cardiac arrest. *Prehospital Emergency Care*. 2005;9(1):61-67.

Halperin HR et al. Cardiopulmonary resuscitation with a novel chest compression device in a porcine model of cardiac arrest. *Journal of the American College of Cardiology*. 2004;44(11): 2214-2220.

Ikeno F et al. Augmentation of tissue perfusion by a novel compression device increases neurologically intact survival in a porcine model of prolonged cardiac arrest. *Resuscitation*. 2006;68:109-118.

Ornato JP et al. Case-control study of AutoPulse™ for out-of-hospital cardiac arrest. Resuscitation Science Symposium, American Heart Association Scientific Sessions, Nov 12, 2005.

Swanson M et al. Effect of a CPR assist device on survival to emergency department arrival in out of hospital cardiac arrest. *Circulation*. 2005;112(17)(Suppl II): 1106.

Timerman S et al. Improved hemodynamic performance with a novel chest compression device during treatment of in-hospital cardiac arrest. *Resuscitation*. 2004;61:273-280.

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With more than 20 years of experience in defibrillation, ZOLL is a pioneer in resuscitation solutions. ZOLL develops technologies to help advance the practice of resuscitation. With products for pacing, defibrillation, circulation, ventilation, data management, and fluid resuscitation, ZOLL provides a comprehensive set of technologies that can help clinicians, EMS professionals, and lay rescuers resuscitate sudden cardiac arrest and trauma victims.

## References

1. Kern K et al. *Bailliere's Clinical Anaesthesiology*. 2000;14(3):591-609.
2. Halperin HR et al. *Journal of the American College of Cardiology*. 2004; 44(11):2214-2220.
3. Ikono F et al. *Resuscitation*. 2006;68:109-118.
4. Timerman S et al. *Resuscitation*. 2004;61:273-280.
5. Ornato JP et al. American Heart Association Annual Meeting, 2005.
6. *Circulation*. 2005;112:IV-207.
7. *Circulation*. 2005;112:IV-59.

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Guidelines 2005  
Ready



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