Manual CPR
has hidden costs

stryker

Poor perfusion

Manual CPR provides only 30-40% of normal blood flow to the brain even when delivered according to guidelines.[1]

30-40%

Provider pain and injury

CPR causes back pain in 60% of EMS personnel.[4]

60%

The American Heart Association states[6]:

Poor-quality CPR is a **preventable harm**

LUCAS 3

The LUCAS chest compression system helps emergency care teams around the world do what they do best — save lives. From the field to the cath lab, LUCAS helps ensure Guidelines-consistent compressions are constantly being administered — helping reduce the risk of injury to caregivers and freeing them up to perform other lifesaving interventions.

Transit injuries and deaths

Unrestrained occupants are 6.5 times more likely to be severely injured and 3.8 times more likely to be killed[2] in the 4,500 ambulances accidents each year.[3]
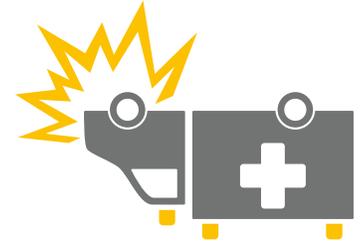
6.5X

Cost of injury

$69,594: cost of a typical strain injury ($33,140 direct and $36,454 indirect costs).[5]

$69K

1. Meaney P, Bobrow B, Mancini M, et al. CPR Quality: Improving cardiac resuscitation outcomes both inside and outside the hospital. A consensus statement from the American Heart Association. *Circulation*. 2013;128(4):417-435
2. Becker L, Zaloshnja E, Levick N, et al. Relative risk of injury and death in ambulances and other emergency vehicles. *Accident analysis and prevention* 2003; 35(6): 941-948.
3. NHTSA's Fatality Analysis Reporting System (FARS) 1992-2010 Final and 2011 Annual Report File (ARF) and National Automotive Sampling System (NASS) General Estimates System (GES), 1992-2011. http://www.ems.gov/pdf/GrundAmbulanceCrashesPresentation.pdf
4. Jones A, Lee R. Cardiopulmonary resuscitation and back injury in ambulance officers. *International Archives of Occupational and Environmental Health*. 2005 May; 78 (4); 332-336.
5. https://www.osha.gov/dcsp/smallbusiness/safetypays/estimator.html. As of August 1, 2018 with a 3% profit margin for strain.
6. Resuscitation Education Series: Educational Strategies to Improve Outcomes From Cardiac Arrest: A Scientific Statement From the American Heart Association. *Circulation*. 2018: 138:e82-e122.