

## CLINICAL "SNIPPETS"

### **A randomized cross-over study of the quality of cardiopulmonary resuscitation among females performing 30:2 and Hands-Only cardiopulmonary resuscitation.**

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**Overview:** Hands-Only cardiopulmonary resuscitation (CPR) is recommended for use on adult victims of witnessed out-of-hospital (OOH) sudden cardiac arrest or in instances where rescuers cannot perform ventilations while maintaining minimally interrupted, quality compressions. Promotion of Hands-Only CPR should improve the incidence of bystander CPR and, subsequently, survival from OOH cardiac arrest; but, little is known about a rescuer's ability to deliver continuous chest compressions of adequate rate and depth for periods typical of emergency services response time. This study evaluated chest compression rate and depth as subjects performed Hands-Only CPR for 10 minutes compared to chest compressions with ventilations (30:2) CPR. It also evaluated fatigue and changes in body biomechanics associated with each type of CPR.

**Conclusions:** Hands-Only CPR required greater effort and was harder to sustain than 30:2 CPR. It is not known whether the observed greater decrement in chest compression depth associated with Hands-Only CPR would offset the potential physiological benefit of having fewer interruptions in compressions during an actual resuscitation. The dramatic decrease in compression depth in the first two minutes reinforces current recommendations that rescuers take turns performing compressions, switching every two minutes or less. Further study is recommended to determine the impact of real-time feedback and dispatcher coaching on rescuer performance.