



High-Quality CPR Consensus Statement

June 25, 2013



CPR Quality: Improving Cardiac Resuscitation Outcomes Both Inside and Outside the Hospital

A Consensus Statement From the American Heart Association

Meaney PA, Bobrow BJ, Mancini ME, Christenson J, de Caen AR, Bhanji F, Abella BS, Kleinman ME, Edelson DP, Berg RA, Aufderheide TP, Menon V, Leary M;

on behalf of the CPR Quality Summit Investigators, the American Heart Association Emergency Cardiovascular Care Committee, and the Council on Cardiopulmonary, Critical Care, Perioperative and Resuscitation.

Circulation. 2013: published online before print June 25, 2013, 10.1161/CIR.0b013e31829d8654



Recommendations

- 1. High-quality CPR should be recognized as the foundation on which all other resuscitative efforts are built. Target CPR performance metrics include**
 - a. CCF greater than 80%
 - b. Compression rate of 100 to 120/min
 - c. Compression depth of at least 50 mm in adults with no residual leaning
 - i. (At least one third the anterior-posterior dimension of the chest in children)
 - d. Avoid excessive ventilation
 - i. (Only minimal chest rise and a rate of less than 12 breaths per minute)
- 2. At every cardiac arrest attended by professional rescuers**
 - a. Use at least 1 modality of monitoring the team's CPR performance
 - b. Depending on available resources, use at least 1 modality of monitoring the patient's physiological response to resuscitative efforts
 - c. Continually adjust resuscitative efforts based on the patient's physiological response
- 3. Resuscitation teams should coordinate efforts to optimize CPR during cardiac arrest by**
 - a. Starting compressions rapidly and optimizing CPR performance early
 - b. Making sure that a team leader oversees the effort and delegates effectively to ensure rapid and optimal CPR performance
 - c. Maintaining optimal CPR delivery while integrating advanced care and transport



Recommendations

- 4. Systems of care (EMS system, hospital, and other professional rescuer programs) should**
 - a. Determine a coordinated code team response with specific role responsibilities to ensure that high-quality CPR is delivered during the entire event
 - b. Capture CPR performance data in every cardiac arrest and use an ongoing CPR CQI program to optimize future resuscitative efforts
 - c. Implement strategies for continuous improvement in CPR quality and incorporate education, maintenance of competency, and review of arrest characteristics that include available CPR quality metrics

- 5. A national system for standardized reporting of CPR quality metrics should be developed**
 - a. CPR quality metrics should be included and collected in national registries and databases for reviewing, reporting, and conducting research on resuscitation
 - b. The AHA, appropriate government agencies, and device manufacturers should develop industry standards for interoperable raw data downloads and reporting from electronic data collected during resuscitation for both quality improvement and research



Resources for High-Quality CPR



Not just a statement release

- AHA has developed and will implement an integrated Marketing Communication plan to:
 - increase awareness of the importance of high-quality CPR
 - educate healthcare providers on how to implement the recommendations to improve CPR performance and increase patient survival and improve outcomes



High-Quality CPR Emblem

- The visual “signature” of the campaign
- Add to your email and social media and link to our website at www.heart.org/cprquality





Website

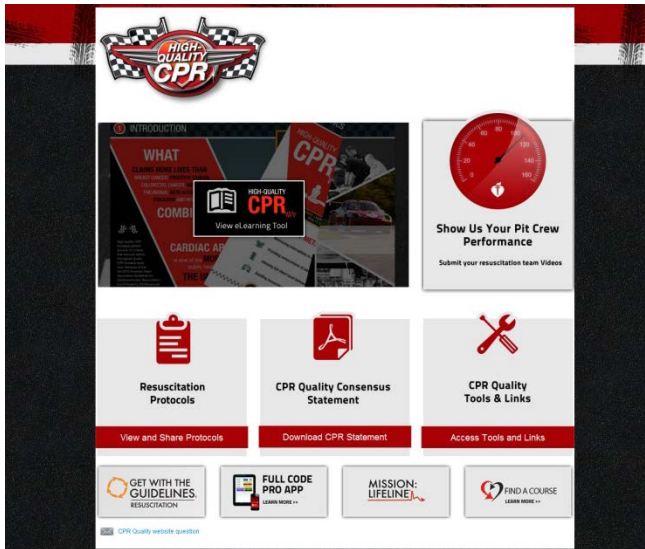
www.heart.org/cprquality

The screenshot shows the website's main content area. At the top left is the High-Quality CPR logo. Below it is a large banner with the text "INTRODUCTION" and "WHAT CLAIMS MORE LIVES THAN HEART DISEASE, STROKE, AND OTHER CAUSES OF SUDDEN DEATH? THE ANSWER MAY BE THE COMBINATION OF HIGH-QUALITY CPR AND EARLY CARDIAC ARREST RESPONSE." A "View eLearning Tool" button is overlaid on the banner. To the right is a circular gauge labeled "Show Us Your Pit Crew Performance" with a red heart icon and the text "Submit your resuscitation team Videos". Below the banner are three main navigation buttons: "Resuscitation Protocols" (with a clipboard icon), "CPR Quality Consensus Statement" (with a PDF icon), and "CPR Quality Tools & Links" (with a wrench and screwdriver icon). Each button has a corresponding action link below it: "View and Share Protocols", "Download CPR Statement", and "Access Tools and Links". At the bottom are four smaller buttons: "GET WITH THE GUIDELINES. RESUSCITATION", "FULL CODE PRO APP LEARN MORE >>", "MISSION: LIFELINE", and "FIND A COURSE LEARN MORE >>". A small link "CPR Quality website question" is at the bottom left.



Website

www.heart.org/cprquality



- eLearning tool
- Video submission
- Resuscitation protocols
- Link to the statement
- CPR Quality report cards
- Full Code Pro link
- Links to other AHA resuscitation programs



eLearning Tool

2 METRICS FOR HIGH-QUALITY CPR

HIGH-QUALITY CPR
TAKES THE LEAD IN SAVING LIVES.
TUNE UP YOUR SKILLS.

VIDEO: LEARN ABOUT CPR QUALITY METRICS

CPR QUALITY METRICS INCLUDE

- Minimizing interruptions in chest compressions
- Providing compressions of adequate rate and depth
- Allowing full chest recoil between compressions
- Avoiding excessive ventilation

VIDEO: LEARN ABOUT TRACKING PROGRESS

Although there is still a gap between our current knowledge of CPR science and its optimal implementation, studies show there is considerable variation in the delivery, monitoring, implementation, and quality improvement of CPR. ALL CARDIAC ARREST VICTIMS SHOULD RECEIVE HIGH-QUALITY CPR WHICH RESULTS IN INCREASED SURVIVAL RATES.

AHA wants to stimulate TRANSFORMATIVE CHANGE ON A SCALE by providing healthcare providers healthcare systems framework to make CPR quality. We've the gap between the evidence and reality and provide a guide hands-on approach implementing the Guidelines for CPR

HIGH-QUALITY CPR Pit Crew Goal Sheet

ACTIVITY 2

MINIMIZING INTERRUPTIONS IN CHEST COMPRESSIONS
Chest compression fraction (CCF) >80%

PROVIDING COMPRESSIONS OF ADEQUATE RATE AND DEPTH
Compression rate of 100-120/min
Compression depth:
-- For adults: at least 2 inches (50 mm)
-- For children and infants: at least one third the AP dimension of the chest

ALLOWING FULL CHEST RECOIL BETWEEN COMPRESSIONS

Which of the following are part of the high-quality CPR metrics as discussed in this tool? When each phrase appears either add it to your Pit Crew Goal Sheet or discard it.

AVOID EXCESSIVE VENTILATION

+ OR -

3 CQI TEAM STRATEGIES

HIGH-QUALITY CPR SHOULD BE RECOGNIZED AS THE FOUNDATION FOR ALL OTHER RESUSCITATIVE EFFORTS.

WINNING STRATEGIES FOR IMPROVING TEAM PERFORMANCE

- Capturing and recording metrics of CPR performance
- Monitoring and providing feedback to rescuers and providers
- Improving resuscitation team dynamics
- Implementing CPR CQI programs

PRECED TO TEAM STRATEGIES SURVEY

HOW CAN WE DO THIS?
TO START, we are going to address and provide recommendations in 4 areas related to CQI: capturing and recording metrics of CPR performance; monitoring and providing feedback to rescuers and providers; improving resuscitation team dynamics; and implementing continuous quality improvement, or CQI, programs.

VIDEO: LEARN ABOUT TRACKING PROGRESS



eLearning Tool

- Walks the user through practical application of the recommendations
- Provides interactive experience with quizzes, videos, checklists and other elements
- Captures before and after knowledge



Questions?