

WORKSHEET for Evidence-Based Review of Science for Emergency Cardiac Care

Worksheet author(s)

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Clinical question.

In adult cardiac arrest (prehospital [OHCA], in-hospital [IHCA]) (P), does the use of devices (eg. CO2 detection device, CO2 analyzer or esophageal detector device) (I) compared with usual management (C), improve the accuracy of diagnosis of airway placement (O)?

Is this question addressing an intervention/therapy, prognosis or diagnosis? Intervention/ therapy

State if this is a proposed new topic or revision of existing worksheet: New topic

Conflict of interest specific to this question

Do any of the authors listed above have conflict of interest disclosures relevant to this worksheet? No

Search strategy (including electronic databases searched).

OVID (Medline and Cochrane Library) and Embase
 [(MeSH exp Colorimetry OR exp Capnography OR exp Carbon dioxide) OR (t.w. co2 detection OR co2 analyzer OR esophageal detector)] AND [MeSH. Heart Arrest OR Intubation, intratracheal]
 AHA Endnote Master Library
 [colorimetry, capnography, co2 detection, or co2 analyzer]
 Manual search of additional references in articles identified by above.

• State inclusion and exclusion criteria

Includes: Human and animal studies, Adult and children

Excludes: Case reports, review articles, and mannequin simulations.

• Number of articles/sources meeting criteria for further review:

Over 900 articles were found, and review of these abstracts identified 55 articles for more thorough review. After thorough review, 39 articles related to the question were identified, and 3 articles related to the accuracy of the usual management of auscultation to identify endotracheal tube placement were also identified.