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

**Worksheet author(s)**

<table>
<thead>
<tr>
<th>Rita Herrington</th>
<th>Date Submitted for review:</th>
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<tbody>
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<td>9/14/2009</td>
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**Clinical question.**

In patients with chest pain (P), does helping administer aspirin (I), compared with not administering aspirin (C), improve outcomes (O)?

<table>
<thead>
<tr>
<th>Is this question addressing an intervention/therapy, prognosis or diagnosis?</th>
<th>Intervention</th>
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<tr>
<td>State if this is a proposed new topic or revision of existing worksheet.</td>
<td>New</td>
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**Conflict of interest specific to this question**

Do any of the authors listed above have conflict of interest disclosures relevant to this worksheet?

Rita Herrington: None

**Search strategy (including electronic databases searched).**

- PubMed “aspirin and myocardial infarction” with 5274 articles with 2 relevant. Added “prehospital” and “lay rescuer” with no additional articles.

- Cochrane “aspirin and myocardial infarction pre-hospital” 32 articles, 0 relevant. Added: “prehospital” and “lay rescuer” with no additional articles.

- Google Scholar “aspirin and myocardial infarction pre-hospital” 12 articles, 0 relevant. Added: “prehospital” and “lay rescuer” with no additional articles.

- Proquest database search using “aspirin, myocardial infarction” with 227 articles with 0 relevant. Added: “prehospital” and “lay rescuer” with no additional articles.

**State inclusion and exclusion criteria**

Peer reviewed articles, English, The following studies were excluded: reviews, case studies

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

2 studies met criteria for further review. These were both LOE 5.
# Summary of evidence

## Evidence Supporting Clinical Question

<table>
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<tr>
<th>Level of evidence</th>
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Barbash, Freimark, Gottlieb, Hod, Hasin, Battler, Crystal, Matetzky, Boyko, Mandelzweig, Behar, Leor, 2002 E

McVaney, Macht, Colwell, Pons 2005 E

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**Level of evidence:**
- **A** = Return of spontaneous circulation
- **B** = Survival of event
- **C** = Survival to hospital discharge
- **D** = Intact neurological survival
- **E** = Other endpoint

**Italics** = Animal studies
### Evidence Neutral to Clinical question

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**Level of evidence**

A = Return of spontaneous circulation  
B = Survival of event  
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*Italics = Animal studies*

### Evidence Opposing Clinical Question

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*Italics = Animal studies*
**REVIEWER’S FINAL COMMENTS AND ASSESSMENT OF BENEFIT / RISK:**

Discussion: Providing aspirin to patient with cardiac ischemia has proven benefits. However, there were no studies that addressed the lay rescuer providing aspirin to the patient with chest pain. Questions remain related to the ability of the lay rescuer to recognize chest pain and distinguish it from other medical emergencies (stroke). This intervention cannot be recommended until studies provide data to support the use of pre-hospital aspirin by the lay rescuer.

**Acknowledgements:**

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**Citation List**
