National Fire Protection Association Association
Document 1710: Threat or Menace?

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Presentation Format

- Lucid, evidence-based propositions
- Random, incisive, unanswerable insults of opponent (AKA “the student”)
- Occasional, justified, self aggrandizement (AKA “the teacher”)
- No use of tacky clichés e.g., “ignorant slut”
- Summary of the rhetorical beatdown I issued him
- Old favorites from past Eagles meetings
Debating Dr Fowler
What is the National Fire Protection Association?

• A trade association that creates and maintains private, copy written, standards and codes for usage and adoption by local governments.

• Mission: Reduce the burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education.

• NFPA develops, publishes, and disseminates more than 300 consensus codes and standards intended to minimize the possibility and effects of fire and other risks.

• NFPA uses a “panel of experts” consensus approach
FOWLER RESPONSE VEHICLE
NFPA 1710

Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments

2010 Edition
5.3.3.3.2 The fire department’s EMS for providing a first responder with AED shall be deployed to provide for the arrival of a first responder with AED company within a **240-second travel time (4 mins)** to **90 percent** of the incidents as established in Chapter 4.

5.3.3.3.3 When provided, the fire department’s EMS for providing ALS shall be deployed to provide for the arrival of an ALS company within a **480-second travel time (8 min)** to **90 percent** of the incidents provided a first responder with AED or BLS unit arrived in **240 seconds or less travel time** as established in Chapter 4.
WHERE DID THESE NUMBERS COME FROM?
Drs Pepe and Fowler
“If CPR was initiated within four minutes of collapse, 40 per cent of patients were admitted and if CPR took four or more minutes to initiate, 18 per cent were admitted (p < .01); 28 per cent and 7 per cent respectively were discharged (p < .01).*

*Stratification at less than four minutes and four minutes or more was chosen because it resulted in the greatest difference in outcome. “
“First, cardiopulmonary resuscitation was initiated sooner in survivors (3.6 ± 2.5 versus 4.3 ± 3.3 minutes; p = 0.03), and second, the initial defibrillation was attempted earlier in survivors (6.1 ± 3 versus 7.3 ± 4.2 minutes; p < 0.02).”
Does It Pick Up Peanuts?
5.3.3.3.2 The fire department’s EMS for providing a first responder with AED shall be deployed to provide for the arrival of a first responder with AED company within a 240-second travel time (4 mins) to 90 percent of the incidents as established in Chapter 4.

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Atlanta Fire Response Times

EMS Benchmark: 30 60 60 240
Fire & Special Operations Benchmark: 30 60 80 240
CY 2010 Median: 158 31 103 212
CY 2009 Median: 154 63 88 213
CY 2008 Median: 141 60 64 205

NFPA standard

Source: EMBRS data, calendar years 2008 through 2010
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>All Cardiac Arrests (N=148)</th>
<th>Witnessed Arrests with an Initial Rhythm of Ventricular Fibrillation (N=90)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age — yr</td>
<td>64±12</td>
<td>65±11</td>
</tr>
<tr>
<td>Male sex — %</td>
<td>80</td>
<td>84</td>
</tr>
<tr>
<td>CPR administered before arrival of defibrillator — no. (%)</td>
<td>63 (43)</td>
<td>49 (54)</td>
</tr>
<tr>
<td>Interval from collapse to CPR — min</td>
<td>—†</td>
<td>2.9±2.8</td>
</tr>
<tr>
<td>Initial rhythm of ventricular fibrillation — no. (%)</td>
<td>105 (71)</td>
<td>90 (100)</td>
</tr>
<tr>
<td>Interval from collapse to attachment of defibrillator — min</td>
<td>—†</td>
<td>3.5±2.9</td>
</tr>
<tr>
<td>Interval from collapse to first defibrillation — min</td>
<td>—†</td>
<td>4.4±2.9</td>
</tr>
<tr>
<td>Interval from collapse to arrival of paramedics — min</td>
<td>—†</td>
<td>9.8±4.3</td>
</tr>
<tr>
<td>Survival to discharge from hospital — no. (%)</td>
<td>56 (38)</td>
<td>53 (59)</td>
</tr>
</tbody>
</table>
Reasons not to Implement NFPA 1710

- The evidence base for any standard must be explicit
- Improvement in any outcome cannot be estimated
Reasons not to Implement NFPA 1710

- Secular trends now permit BLS personnel to work out-of-hospital cardiac arrest and other high acuity cases
- Solutions will be determined by local conditions
Reasons not to Implement NFPA 1710

Unfortunately, feasibility matters
Summary of Dr Fowler’s position on this issue
Gratuitous Fowler Abuse:

“How can you breathe through that little thing?”
Old Favorites