### EMT

#### Airway, Respiration & Ventilation
4 hours

**Ventilation** – 3 hours
- Minute ventilation
- Effect on cardiac return
- Assisted Ventilation
  - Assessment/when to ventilate
  - Respiratory failure – recognition, etc.
  - Adjuncts
  - CPAP/BPAP
  - Positioning (adult & pediatric)
  - Suctioning

**Oxygenation** – 1 hour

#### Cardiovascular
6 hours

**Post resuscitation Care** – 0.5 hours
- Recognition of ROSC
- Induced hypothermia

**Stroke** – 1 hour
- Assessment (stroke scale)
- Oxygen administration
- Time of onset
- Transport destination

**Cardiac Arrest** – 0.5 hours
- VAD

**Cardiac Rate Disturbance (pediatrics)** – 1 hour
- Tachycardia
- Bradycardia
- Irregular pulse

**Pediatric Cardiac Arrest** – 2 hours
- Two-thumb encircling technique
- Ventilation/compression ratios
  - One and two operator AED

**Chest Pain from Cardiovascular Cause** – 1 hour
- Nitroglycerin administration
- ASA administration
- Oxygen administration
- Transportation destination

### Paramedic

#### Airway, Respiration & Ventilation
4 hours

**Ventilation** – 2 hours
- Assessment/when to ventilate
- Respiratory failure – recognition, etc.
- Positioning (adult & pediatric)
- Suctioning
- Minute ventilation – effect on cardiac return

**Capnography** – 1 hour
- In-line, side stream, perfusing & nonperfusing

**Airway Management** (adult & pediatric) – 1 hour
- Intubation vs. supraglottic airway device (adult only)

#### Cardiovascular
10 hours

**Post resuscitation Care** – 2 hours
- Recognition of ROSC
- Hemodynamics
- Oxygenation
- Induced hypothermia

**VAD** – 0.5 hours

**Stroke** – 1.5 hours
- Assessment
- Oxygen administration
- Time of onset (duration)
- Transport destination
- Fibrinolytics (checklist)

**Cardiac Arrest** – 2 hours
- Optimal chest compressions
  - Depth, rate, recoil and pause
  - Mechanical CPR devices
- Airway issues with cardiac arrest
  - Halting CPR to intubate
  - Hyperventilation
  - Supraglottic vs. ET vs BVM
- Chain of Survival
- Termination Decisions (adult & pediatric) criteria (NAEMSP/AHA position)
- ETCO2 changes during arrest and RSOC

**Congestive Heart Failure** – 0.5 hours
- Recognition
- Treatment

**Pediatric Cardiac Arrest** – 2.5 hours
- Optimal chest compressions
- Techniques
- Ventilation/compression ratios
  - One and two operator
- HOCM
- Comotio cordis
- Long QT

Con’t
<table>
<thead>
<tr>
<th>AHA Channelopathy</th>
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<tbody>
<tr>
<td>ACS – 1 hour</td>
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<tr>
<td>12 lead review</td>
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<td>STEMI imposters</td>
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<td>Oxygen administration</td>
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<td>Transportation destination (systems of care)</td>
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</tbody>
</table>

**Trauma**

2 hours

**CNS Injury** – 0.5 hours
- Sports injuries (concussions)
- Helmet considerations

**Tourniquets** – 0.5 hours

**Field Triage** – 1 hour
- CDC trauma triage
- MCI (MUCC/SALT)

**Medical**

6 hours

**Special Healthcare Needs** – 1 hour
- Tracheostomy care
- Dialysis shunts
- How to deal with patient and equipment
  - Feeding tubes, VP shunts, etc.
  - Cognitive issues

**OB Emergency** – 1 hour
- Suctioning of the neonate
- Neonatal resuscitation
- Abnormal presentation
- Nuchal cord

**Psychiatric Emergencies** – 1.5 hours
- Patient restraint
- Excited delirium
- Depression/suicide
  - Synthetic stimulants
  - THC (natural/synthetic)

**Endocrine** – 1 hour
- Medication pumps
- Glucometer awareness
- Diabetes
- Metabolic syndrome

**Immunological Diseases** – 1 hour
- Allergic reaction
- Anaphylaxis

**Communicable Diseases** – 0.5 hours
- Hygiene (handwashing, etc.)
- Vaccines (CDC recommendations)
- MRSA/Influenza
- Public health – pandemics, reporting, etc.

**Trauma**

4 hours

**CNS Injury** – 2 hours
- Sports injuries (helmets, concussions)
- ETCO2 monitoring

**Tourniquets** – 0.5 hours

**Field Triage** – 1 hour
- CDC trauma triage
- MCI (MUCC/SALT)

**Fluid Resuscitation (phys/over-loading)** – 0.5 hours

**Medical**

7 hours

**Special Healthcare Needs** – 2 hour
- Tracheostomy care
- Dialysis shunts
- How to deal with patient and equipment
  - Feeding tubes, VP shunts, etc.
  - Cognitive issues

**OB Emergency** – 1 hour
- Suctioning of the neonate
- Neonatal resuscitation
- Abnormal presentation
- Nuchal cord

**Communicable Disease** – 1 hour
- Appropriate precautions
- Vaccines (CDC recommendations)
- MRSA/Influenza
- Public health – pandemics, reporting, appropriate precautions, etc.
- SIRS vs. sepsis vs. septic shock
  - Fluid resuscitation

**Medication Delivery** – 1 hour
- IM vs SC (e.g. epi)
- Atomized/Nasal

**Pain Management** – 1 hour
- NAEMSP pain management
- AAP pediatric pain management

**Psychiatric Emergencies** – 1 hour
- Patient restraint
- Excited delirium
- Depression/suicide
- Toxicological emergencies
### Operations

2 hours

**At-Risk Populations** – 0.5 hours
- Human trafficking (DHS presentation)
- Pediatric
- Geriatric
- Economically disadvantaged
- Domestic violence

**Pediatric Transport** (NHTSA) – 0.5 hours

**Affective** – 0.5 hours
- Professionalism
- Cultural competency
- Changing demographics

**Role of Research** – 0.5 hours

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### Operations

5 hours

**At-Risk Populations** – 1 hour
- Human trafficking (DHS presentation)
- Pediatric
- Geriatric
- Economically disadvantaged
- Domestic violence

**Pediatric Transport** (NHTSA) – 0.5 hours

**Culture of Safety** – 0.5 hours
- Adverse event reporting
- Medication safety

**Affective** – 1 hour
- Professionalism
- Cultural competency
- Changing demographics

**Crew Resource Management** – 1 hour

**Role of Research** – 1 hour

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### EMR Recertification Guidelines

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<tr>
<th>Category</th>
<th>Hours</th>
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<tr>
<td>- Ventilation – 1 hour</td>
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<td>- Oxygenation – 1 hour</td>
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<tr>
<td><strong>Cardiovascular</strong></td>
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<td>- Stroke – 0.5 hours</td>
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<td>- Cardiac arrest – 1 hour</td>
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<td>- Post resuscitative care – 0.5 hours</td>
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<td>- Bleeding control – 0.5 hours</td>
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<td>- Shock management – 0.5 hours</td>
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