Sudden cardiac arrest (SCA) is a life-threatening emergency that occurs when the heart suddenly stops beating. SCA results in death if not treated within minutes.

According to the Centers for Disease Control and Prevention, more than 300,000 SCA incidents occur outside of hospitals each year in the United States alone.

**Prevention**
- Review your state SCA prevention acts.
  - Get in touch with your government affairs chair if there aren’t any yet.
- Review and practice your emergency action plan (EAP).
- Ensure facilities are equipped with an automated external defibrillator (AED) and staff is trained in CPR and AED use.
  - Check the batteries in the AED regularly.
  - An AED can cover about five football fields, but you should consider obstacles that reduce the effective area an AED can cover.
- Consider common factors that put athletes at risk for SCA, such as family history, heart murmur or Marfan syndrome.

**In the Moment**
- Recognize SCA.
- Activate EAP and start CPR.
- Remove restrictive clothing and apply AED.
  - Identify who’s in command; a health care professional, such as an athletic trainer, should handle the situation.
  - Anticipate next steps in EAP and offer to help.
  - Stay calm.

**Return to Play**
- Patient should obtain written clearance from a qualified medical professional, such as a cardiologist, and a certified athletic trainer, if necessary.
- Gradually increase activity, rather than start with sudden or strenuous activity at the onset.
- Continue to monitor athlete for any recurring signs or symptoms of SCA.

**Signs and Symptoms of Cardiac Arrest in Athletes**

<table>
<thead>
<tr>
<th>Male Athletes</th>
<th>Female Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest, ear or neck pain</td>
<td>Center chest pain that comes and goes</td>
</tr>
<tr>
<td>Severe headache</td>
<td>Lightheadedness</td>
</tr>
<tr>
<td>Excessive breathlessness</td>
<td>Shortness of breath with or without discomfort</td>
</tr>
<tr>
<td>Vague discomfort</td>
<td>Pressure, squeezing, fullness</td>
</tr>
<tr>
<td>Dizziness, palpitations</td>
<td>Nausea, vomiting</td>
</tr>
<tr>
<td>Abnormal fatigue</td>
<td>Cold sweat</td>
</tr>
<tr>
<td>Indigestion, heartburn</td>
<td>Pain or discomfort in arms, back, neck, jaw or stomach</td>
</tr>
</tbody>
</table>

*Many young cardiac arrest victims have no symptoms until the cardiac arrest occurs. Keep in mind that anyone, regardless of sex or gender, can experience the symptoms listed above.*

**Sources:** CDC, Korey Stringer Institute, National Athletic Trainers’ Association, Sudden Cardiac Arrest Foundation, University of Washington Medicine Center for Sports Cardiology.

Infographic handout provided by National Athletic Trainers’ Association.