Cindy J. Chang, MD
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UCSF Sports Medicine
Co-Director, Sports Concussion Clinic
UCSF Benioff Childrens Hospital
Past President
American Medical Society for Sports Medicine (AMSSM)
(2011-2012)
Team Physician
University of California-Berkeley
Berkeley High School
Sports Medicine Advisory Committee
California Interscholastic Federation (CIF)
National Federation of High School Associations (NFHS)

2017 Collaborative Solutions for Safety in Sport National Meeting:
A National Approach to Health & Safety Best Practices & Policy Change

March 28, 2017
A Message from Jonathan Drezner MD

• Professor, Department of Family Medicine
• Director, Center for Sports Cardiology
• Past President, AMSSM (2012-13)
• Team Physician, Seattle Seahawks and UW Huskies
What is needed to effectively impact change?
Quick Stats

- 75% of all fatalities that occur during sports are cardiovascular related
- 1 out of 70 high schools will have an SCA each year, with half of the victims being students or student-athletes
Sudden cardiac arrest and death in competitive athletes in the United States: a 2-year prospective study

NCCSIR Division of Cardiac Injury in Sport
University of Washington
Seattle, WA
SCA/D in Competitive Athletes
174 cases July 1, 2014 – June 30, 2016 in the U.S.

55% basketball and football athletes
Survival
N=174 cases SCA/D

<table>
<thead>
<tr>
<th></th>
<th>Survival Rate</th>
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<tbody>
<tr>
<td>Overall</td>
<td>40.8%</td>
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<tr>
<td>During exercise</td>
<td>45.7%</td>
</tr>
<tr>
<td>Middle school</td>
<td>37.5%</td>
</tr>
<tr>
<td>High school</td>
<td>49.0%</td>
</tr>
<tr>
<td>College</td>
<td>39.1%</td>
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60% of athletes with SCA still die
AEDs in Schools and Sport

• Provide a means of early defibrillation and the potential for effective secondary prevention of SCD

  – Athletes
  – Students
  – Staff
  – Spectators
  – Coaches
  – Officials
  – Visitors
It’s NOT just about AEDs…

EMERGENCY PREPAREDNESS

- Written Emergency Action Plan for SCA
- All staff awareness
- Emergency communication
- Trained responders in CPR/AED
- Access to early defibrillation (<3 min collapse to shock)
- Practice and review of the EAP at least annually
- Integration of AED into local EMS system
Survival Following SCA

2,149 High Schools followed for 2 years; N=59 Cases of SCA

SCA in athletes during sport is largely a survivable event through prompt treatment and access to an AED

Drezner at al, BJSM 2014
Be a HERO!

U High's Bates-Diop recovering from 'cardiac event'

Randy Kindred rkindred@pantagraph.com  Feb 11, 2017  📞 0

NORMAL — University High School sophomore basketball player Kai Bates-Diop was recovering in a Peoria hospital Friday after collapsing during practice Thursday from what his family described as “a cardiac event.”

Bates-Diop’s parents, Richard and Wilma Bates, issued a statement Friday night thanking the U High athletic training staff for its “appropriate and fast response,” which they said enabled their son to receive “immediate attention.”

“He is receiving the best care possible, and is recovering nicely,” they added. “We appreciate all the well wishes and prayers from friends and family — and so many others. Kai is a remarkable
Be a HERO!

MacArthur student brought back to life on football field

February 6, 2017
California SB 658 – The AED Law
What is needed to effectively impact change?

TAKE OWNERSHIP.
But you don’t have to do it alone...
But you don’t have to do it alone…
What is a Sports Medicine Physician?

- Primary Care Sports Medicine Specialist
- Primary Care Sports Medicine Physician
- Primary Care Team Physician
- Sports Medicine Specialist

- Undergraduate Education (4 yrs)
- Medical School (4 yrs of allopathic or osteopathic)
- Residency training (3-4 yrs) in a Primary Care Specialty
- Sports Medicine Fellowship training (1-2 yrs)
What is a Sports Medicine Physician?

• Residency training in a Primary Care Specialty
  • Family Medicine
  • Pediatrics
  • Internal Medicine
  • Physical Medicine & Rehabilitation
  • Emergency Medicine

• Board certification in the specialty above, and then Certificate of Added Qualifications (CAQ) in Sports Medicine
What is a Sports Medicine Physician?

• Cindy J. Chang, M.D., CAQSM, FACSM, FAAFP

• MD = Medicinae Doctor (Doctor of Medicine)
• DO = Doctor of Osteopathy

• Dr. Cindy J. Chang, Sports Medicine

???
What kind of Doctor treats sports injuries and athletes?

• “Doctor” or “Dr.” can be a:
  • chiropractor (DC)
  • physical therapist (DPT)
  • podiatrist (DPM)
  • dentist (DDS or DDM)
  • optometrist (OD)
  • acupuncturist (LAC)
  • psychologist or neuropsychologist (Ph.D., Psy.D.)
  • nutritionist (Sc.D.)
  • professor (Ph.D.)
  • educator (Ed.D)
  • public health administrator (DPH)
What is a Sports Medicine Physician?

• Cindy J. Chang, M.D., CAQSM, FACSM, FAAFP

• MD = Medicinae Doctor (Doctor of Medicine)
• DO = Doctor of Osteopathy

• If “Dr. Cindy J. Chang, Sports Medicine”??
  • Look up their degree!
What *isn’t* a Sports Medicine Physician?

- Non-operative orthopedist
- Non-surgical sports medicine physician
- Musculoskeletal specialist
- Physician Assistant (PA)

**Why?**
- Besides being able to diagnose and manage injuries to the MS system, a sports medicine physician can provide *comprehensive care* to the athlete.
What else can a Sports Medicine Physician do?

- Concussion (mild traumatic brain injury) and other head injuries
- Athletes with chronic or acute illness (such as infectious mononucleosis, asthma or diabetes)
- Nutrition, supplements, ergogenic aids, and performance issues
- Exercise prescription for patients who want to increase their fitness
- Injury prevention
- “Return to play” decisions in the sick or injured athlete
- Recommendations on safe strength training and conditioning exercises
- Healthy lifestyle promotion
A Sports Medicine Physician also serves as a Team Physician

- Pre-participation physical examination
- Injury assessment and management
- Care of sports-related and general medical needs of athletes
- Special populations (geriatric, disabled, women, youth, etc.)
- Sports psychology issues
- Substance use issues
- Education and counseling on illness & injury prevention
- Coordinating care with other members of the sports medicine team to include athletic trainers, physical therapists, personal physicians, other medical and surgical specialties, and other ancillary personnel of specialty care and rehabilitation
- Communication with athletic trainers, coaches, school administration, as well as athletes and their families
www.amssm.org
**www.amssm.org**

### Sports Medicine Center for Young Athletes

**UCSF Medical Center**
Sports Medicine

<table>
<thead>
<tr>
<th>Name</th>
<th>Distance</th>
<th>Phone Number</th>
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<th>Website</th>
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<tbody>
<tr>
<td>Sarah Pless-Franzoglan MD</td>
<td>30.32 miles</td>
<td>Click Here</td>
<td>El Dorado Hills Sports Medicine 1003 Espanola Drive - Suite 2</td>
<td>[Click Here]</td>
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<tr>
<td>Matthew Nocetti DO</td>
<td>33.21 miles</td>
<td>Click Here</td>
<td>Creekside Orthopaedic Family Medicine 2731 Creekside Drive - Suite 100</td>
<td>[Click Here]</td>
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<tr>
<td>Daniel Parker MD, MHPN</td>
<td>40.32 miles</td>
<td>Click Here</td>
<td>Summit Orthopaedic Specialists 6403 Coyle Avenue - Suite 170</td>
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<tr>
<td>Kuo Doo MD</td>
<td>40.63 miles</td>
<td>Click Here</td>
<td>Rocklin Family Practice and Sports Medicine 3104 Sunset Boulevard - Suite 2B</td>
<td>[Click Here]</td>
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Please enter a search term relevant to the search type. For US States - use only letter abbreviations.

**Choose Search Type**
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**Enter Search Term**
- volcano

**Zip Code:**
95689

**Choose Search Radius:**
25 Miles

**Find A Sports Doc**

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**Sports Medicine Center**

*National Athletic Trainers' Association*

*American Medical Society for Sports Medicine*

*Keeping Athletes Safe and Healthy*

*Benioff Children’s Hospitals*
Oakland | San Francisco

*UCSF Medical Center*
Sports Medicine

*UCSF School of Medicine*
AMSSM Practice and Policy Committee

- **MA H294**: CPR training in HS
- **MA H1155**: Commission to study concussions in varsity sports in all HS
IOC WORLD CONFERENCE
PREVENTION OF INJURY
AND ILLNESS IN SPORT

16 – 18 MARCH 2017
MONACO,
GRIMALDI FORUM

SPORTS MEDICINE CENTER
FOR YOUNG ATHLETES

UCSF Medical Center
Sports Medicine

UCSF School of Medicine

Benioff Children's Hospitals
Oakland | San Francisco
"An ounce of prevention is worth a pound of cure."
Benjamin Franklin

“28g of Prevention is worth 454g of Cure”
2017 Collaborative Solutions for Safety in Sport National Meeting