#### Cindy J. Chang, MD

Associate Clinical Professor 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)





Leading Sports Medicine into the Future

### 2017 Collaborative Solutions for Safety in Sport National Meeting:

A National Approach to Health & Safety Best Practices & Policy Change

#### March 28, 2017



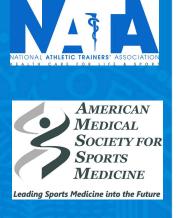






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### A Message from Jonathan Drezner MD

- Professor,
   Department of
   Family Medicine
- Director, Center for Sports Cardiology
- Past President, AMSSM (2012-13)
- Team Physician, Seattle Seahawks and UW Huskies





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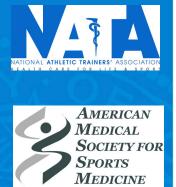




Oakland | San Francisco

## What is needed to effectively impact change?





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## **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





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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

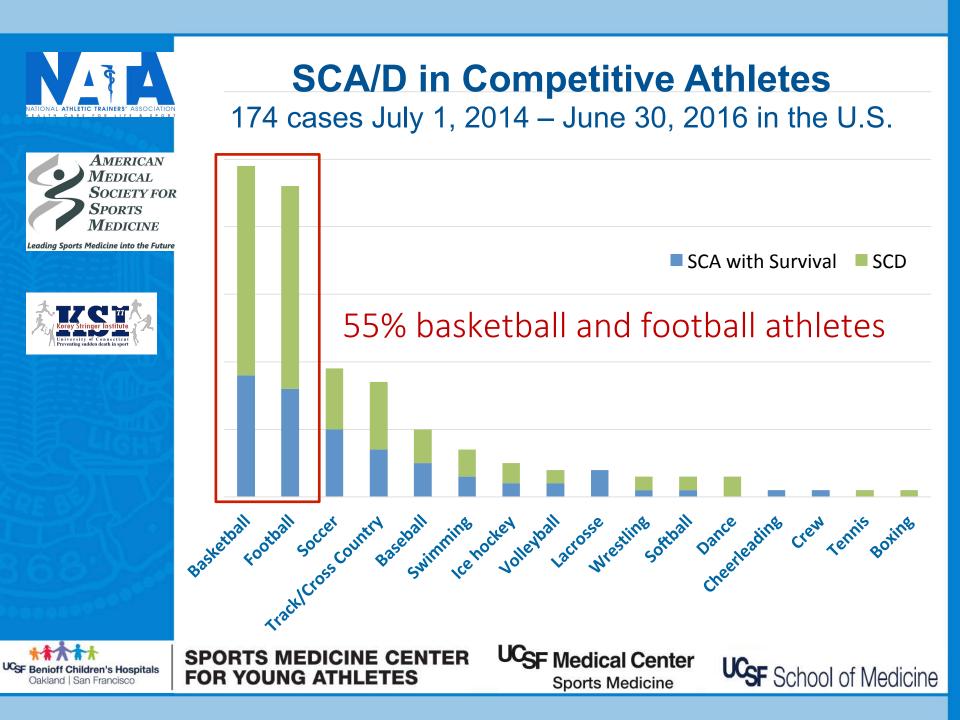


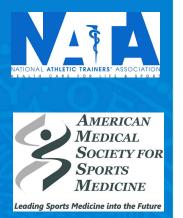




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### Survival N=174 cases SCA/D

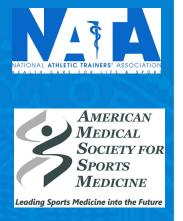
Overall	40.8%
During exercise	45.7%
Middle school	37.5%
High school	49.0%
College	39.1%

### 60% of athletes with SCA still die



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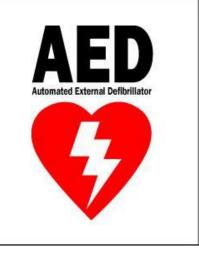




### **AEDs in Schools and Sport**

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

- -Athletes
- -Students
- -Staff
- -Spectators
- -Coaches
- -Officials
- -Visitors









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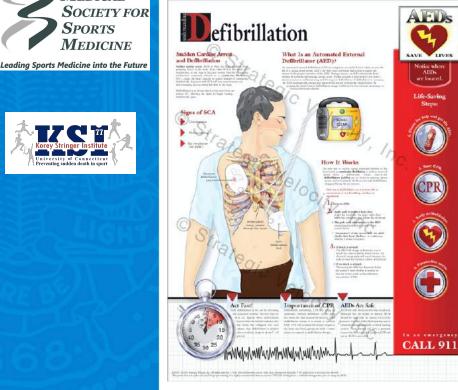




**S**PORTS

Medicine

### It's NOT just about AEDs... **EMERGENCY PREPAREDNESS**



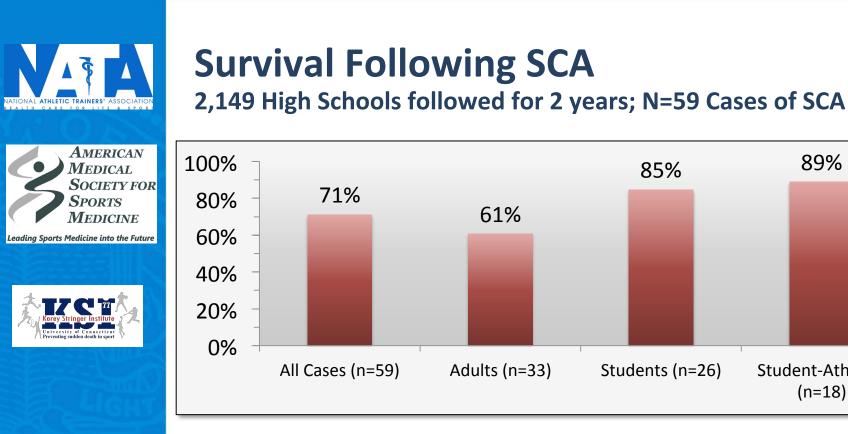
**Written Emergency Action Plan for SCA** All staff awareness **Emergency communication** 

- Trained responders in CPR/ **AED** 
  - Access to early defibrillation (<3 min collapse to shock)
- Practice and review of the EAP at least annually
- V Integration of AED into **local EMS system**



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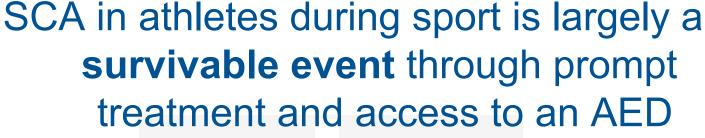




**Drezner** at al, BJSM 2014

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UCSF Medical Center **Sports Medicine** 



89%

Student-Athletes (n=18)



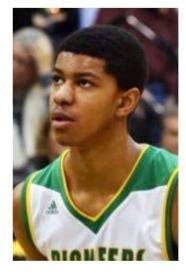




# Be a HERO!

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

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



#### f 🎽 🖬 🖨 ♡

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."

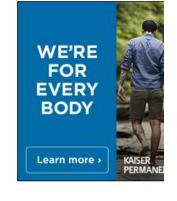
"He is receiving the best care possible, and is recovering nicely," they added. "We appreciate all the well wishes and prayers from friends and family — and so many others. Kai is a remarkable

#### February 11, 2017



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UCSF Medical Center Sports Medicine



#### Latest Local

UCSF School of Medicine



Pantagraph All-Area I team





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## Be a HERO!

#### MacArthur student brought back to life on football field



#### February 6, 2017



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#### California SB 658 – The AED Law





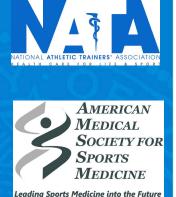


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racing heart

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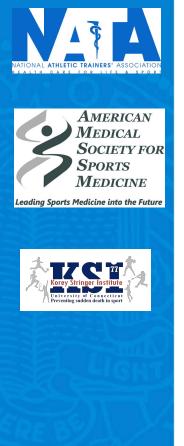
# What is needed to effectively impact change?





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### But you don't have to do it alone...







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- 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)

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- 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



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- Cindy J. Chang, M.D., CAQSM, FACSM, FAAFP
- MD = Medicinae Doctor (Doctor of Medicine)
- DO = Doctor of Osteopathy

Dr. Cindy J. Chang, Sports Medicine
 ???



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# DR. DAVID GEIER

#### Dr. Carmen Johanning







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# 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 neuropsychogist (Ph.D., Psy.D.)
  - nutritionist (Sc.D.)
  - professor (Ph.D.)
  - educator (Ed.D)
  - public health administrator (DPH)

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# DR. DAVID GEIER

#### Dr. Carmen Johanning







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- 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!



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- 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

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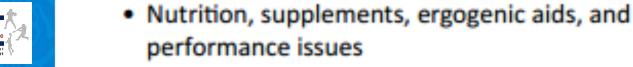
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AMERICAN
MEDICAL
<b>Society for</b>
Sports
MEDICINE
Leading Sports Medicine into the Future





Exercise prescription for patients who want to increase their fitness

What else can a Sports Medicine

**Physician do?** 

Concussion (mild traumatic brain injury) and other

Athletes with chronic or acute illness (such as

infectious mononucleosis, asthma or diabetes)

Injury prevention

head injuries

- "Return to play" decisions in the sick or injured athlete
- Recommendations on safe strength training and conditioning exercises
- Healthy lifestyle promotion



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### 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

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UCSF Medical Center **Sports Medicine** 

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Distance: Name: Address: Primary Email: Bus. phone: City: State/Province: ZIP Code: Map:	30.52 miles Sarah Preiss-Farzanegan MD El Dorado Hills Sports Medicine 903 Embarcadero Drive - Suite 2 Click Here 916-293-8035 El Dorado Hills CA 95762 Click Here
Bus, Country: Website:	USA [Click Here]
Distance: Name: Address: Primary Email: Bus. phone: City: State/Province: ZIP Code: Map: Bus. Country:	33.21 miles Matthew Resciniti DO Creekside Osteopathic Family Medicine 1731 Creekside Drive - Suite 100 Click Here 973-519-2404 Folsom CA 95630 Click Here USA
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\$

abbreviations.

City

volcano

Zip Code: 95689

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25 Miles \$

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States - use only letter









<b>AMSSM</b>	<b>Practice</b>	and	Policy	<b>Committee</b>
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Strong Support	Tier 1	NJ	<u>A24</u>	<u>81</u> b	Requires public school students with concussion to be evaluated by licensed health care professionals before return to school; requires school districts to provide restrictions or limitations to student as needed.					Received in the Senate without Reference, 2nd Reading			10/05/201	3 - Crosse Over	i		
Strong Support	Tier 1	Т	N <u>S</u>	<u>B1300</u>	0.000000000	As introduced, creates a task force to study the effects of concussions on student athletes in high school college Amends TCA Title 49, Chapter 7.					and Passed on Second Consideration, refer to Senate Geoperations Committee					3/2017	1 - Introduced
Strong Supp	port	Tier	1		MA	<u>H294</u>	Providing cardiopulmonary resuscitation	training in high schools			Senate	01/	23/2017 2	- In Committe	e CPR	Educatio	a
Strong Support	Tier 1	,	MA	<u>H115</u>	5	ing a commissio rivate high schoo	n to study concussions that occur as a result o ols	of varsity sports in public	Senate	concurred	i 01/23/2017		2 - In Committe	<ul> <li>A second sec second second sec</li></ul>		ady Committee, Member	
Strong Support	Tier 1	8	MA	<u>H118</u>	3 To pro	To protect sports medicine professionals				e concurred 01/23/2017		2 - In Committe	e Trave	Physician			
Strong Oppose Tier 1 OR HB2390 Relating to concussions sustained by athletes; declaring an emergency.					Re	Referred to Health Care. 01/17/2017 2 -			2 - In Co	mmittee	Concussions, S	ussions, Student Athletes					
Strong Oppose	Tie 1	r	OR	<u>SB21</u>	7 Relati emerg		ts sustained by athletes; declaring an	Senate Health Care Pub B)	ng and Work Se	ssion (13:0	03/30/2017 HR	0/2017 HR 03/30/2017			Concussions, Student Athletes		
Strong Support	Tier 1	N	IV A	<u>\B85</u>	E	tequires instruction in cardiopulmonary resuscitation and the use of an automated external defibrillator n certain schools. (BDR 34-569)				Read first time. Referred to Committee on Education. To committee.			03/16/2017	3 - Crossed Over	AED	s/ CPR in ols	

- *MA H294:* CPR training in HS
- MA H1155: Commission to study concussions in varsity sports in all HS



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IOC WORLD CONFERENCE PREVENTION OF INJURY AND ILLNESS IN SPORT

16 - 18 MARCH 2017

MONACO, GRIMALDI FORUM





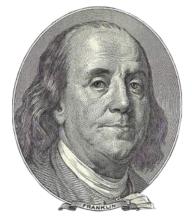
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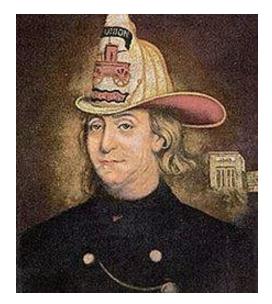




"An ounce of prevention is worth a pound of cure." Benjamin Franklin

"28g of Prevention is worth 454g of Cure"







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### 2017 Collaborative Solutions for Safety in Sport National Meeting





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