



WHAT'S KILLING YOUR HIGH SCHOOL STUDENTS

National Federation of State
High School Associations



Take Part. Get Set For Life.™

William M. Heinz, MD – Chair of NFHS SMAC
2016 NFHS Legal Meeting
Hyatt Regency Hotel – Indianapolis, IN
April 15, 2016





MOST COMMON CAUSES OF DEATH IN ORGANIZED SPORT

- Cardiac
- Head injuries
- Neck injuries
- Heat stroke
- Asthma
- Exertional sickling
- Trauma (not to head/neck)
- Other – lightning, diabetes





SCA/SCD

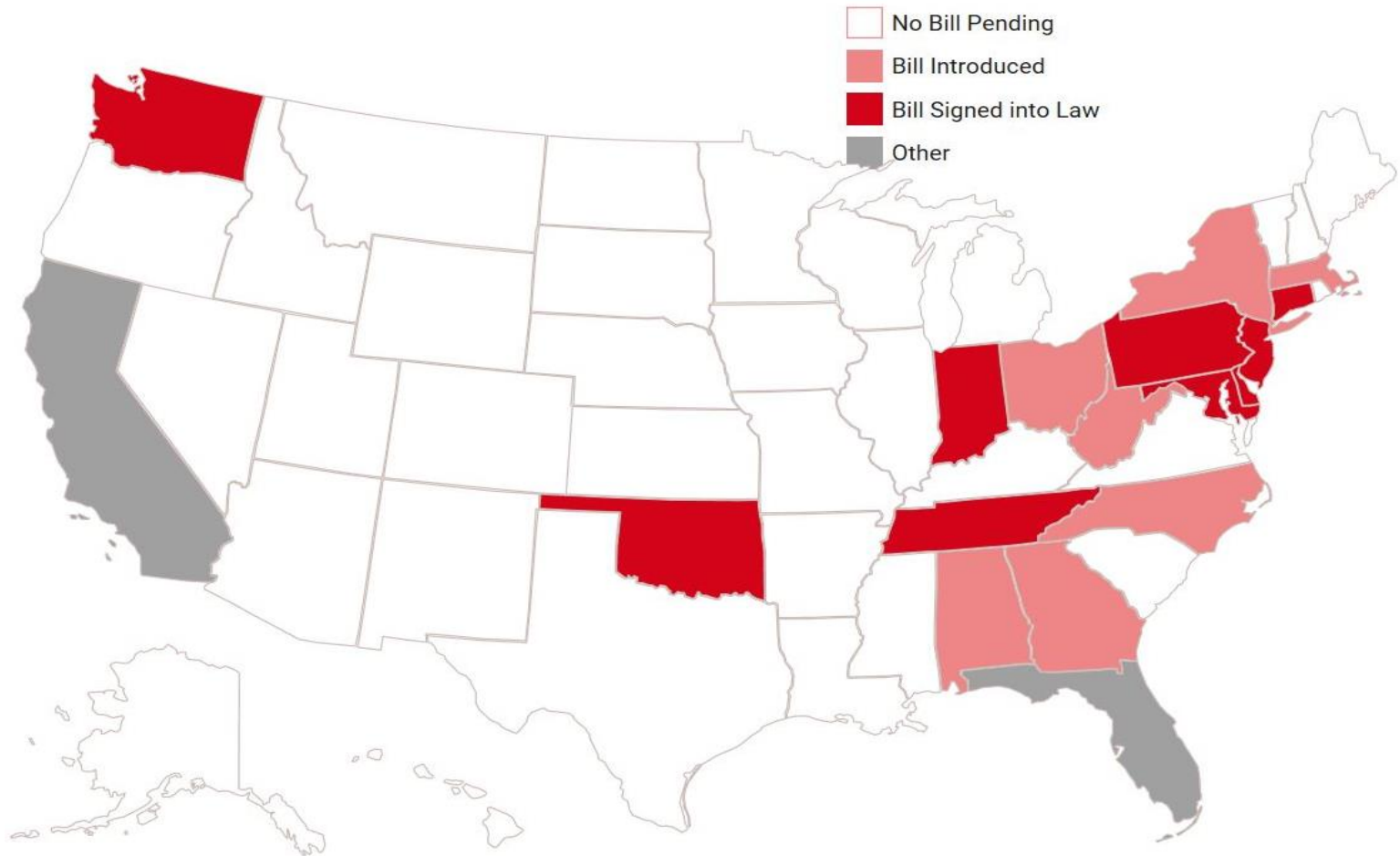
- Sudden cardiac death (SCD) is the sudden death of an individual during or within 1 hour after exercise due to a cardiovascular disorder.
- Sudden death from intrinsic cardiac conditions remains the leading cause of mortality in athletes during sport.

Harmon KG, Asif IM, Klossner D, et al. Incidence of sudden cardiac death in national collegiate athletic association athletes. *Circulation* 2011;123:1594–1600.

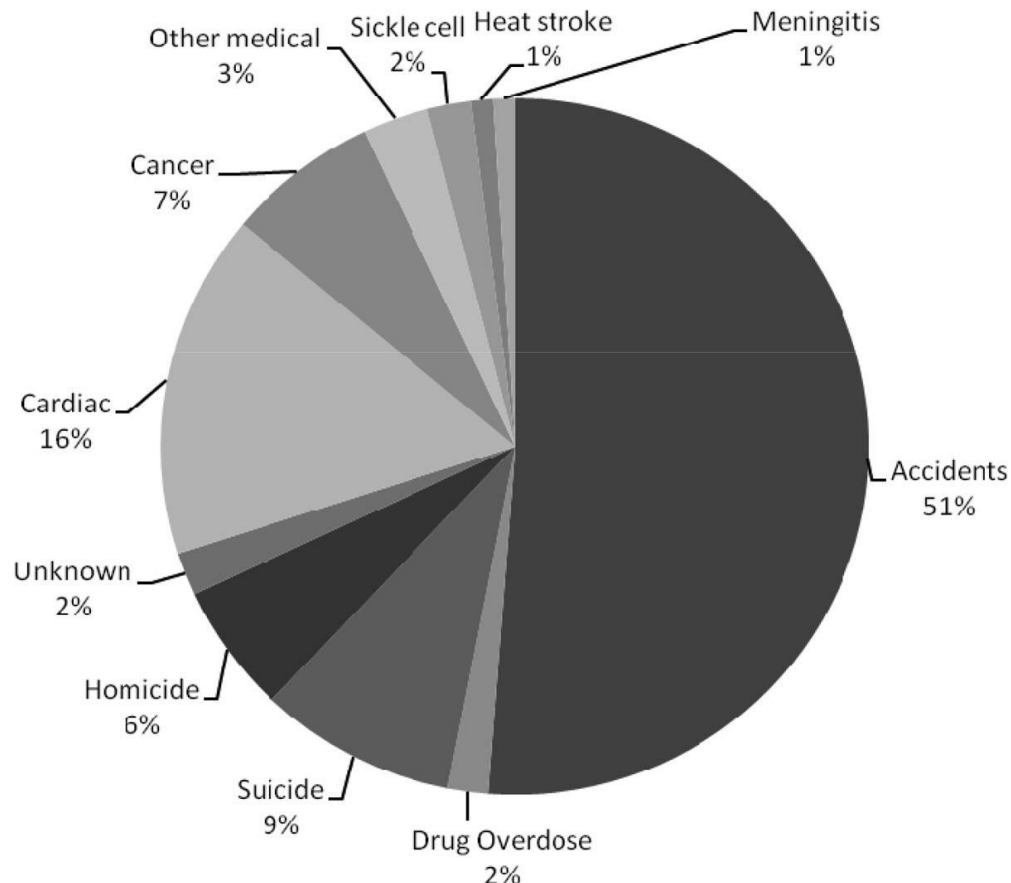
Maron BJ, Doerer JJ, Haas TS, et al. Sudden deaths in young competitive athletes: analysis of 1866 deaths in the United States, 1980–2006. *Circulation* 2009;119:1085–92



SUDDEN CARDIAC ARREST LEGISLATION BY STATE



CAUSES OF SUDDEN DEATH IN NATIONAL COLLEGIATE ATHLETIC ASSOCIATION ATHLETES, 2004 TO 2008.



Kimberly G. Harmon, Irfan M. Asif, David Klossner and Jonathan A. Drezner

Incidence of Sudden Cardiac Death in National Collegiate Athletic Association Athletes

Circulation. 2011;123:1594-1600;



INCIDENCE OF SUDDEN CARDIAC DEATH IN NATIONAL COLLEGIATE ATHLETIC ASSOCIATION ATHLETES

KIMBERLY G. HARMON, IRFAN M. ASIF, DAVID KLOSSNER AND JONATHAN A. DREZNER

CIRCULATION. 2011;123:1594-1600

- During 5-year period, 273 deaths in 1,969,663 athlete participant-years.
- 187 (68%) due to nonmedical or traumatic causes
- 80 (29%) due to medical causes, 6 (2%) to unknown causes.
- Of the medical causes, 45 (56%) were cardiovascular-related sudden death, representing 75% of sudden deaths during exercise, **but only 16% of total deaths.**



NATIONAL CENTER FOR CATASTROPHIC SPORT INJURY RESEARCH

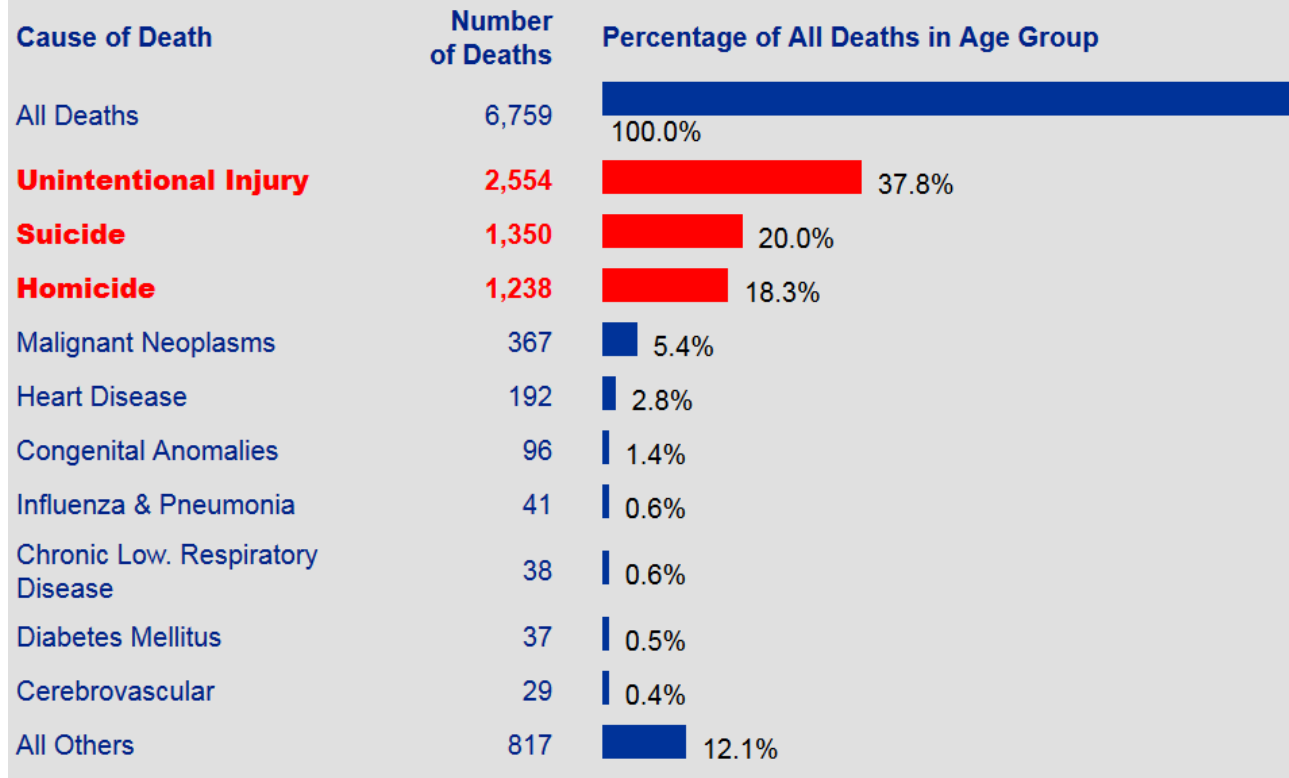
- Director: Kristen Kucera, Ph.D., ATC, LAT
Medical Director: Robert Cantu, MD
- The University of North Carolina at Chapel Hill
- The *mission* of the **National Center for Catastrophic Sport Injury Research (NCCSIR)** is to conduct surveillance of catastrophic injuries and illnesses related to participation in organized sports in the United States at the collegiate, high school, and youth levels of play. In working through a Consortium for Catastrophic Injury Monitoring, the NCCSIR aims to track cases through a systematic data reporting system that allows for longitudinal investigation of athletes suffering from catastrophic injuries and illnesses. The goal of the Center is to improve the prevention, evaluation, management, and rehabilitation of catastrophic sports-related injuries



SUMMARY: IN 2013, THE TOP 2 LEADING CAUSES OF DEATH FOR BOTH MALES AND FEMALES AGED 15-19 WERE UNINTENTIONAL INJURY AND SUICIDE. HOMICIDE RANKED 3RD FOR MALES AND 4TH FOR FEMALES. RESTRICTING TO UNINTENTIONAL INJURIES ONLY, MV TRAFFIC, POISONING AND DROWNING ARE RANKED HIGHEST FOR BOTH GENDERS. DATA ARE COMPILED FROM DEATH CERTIFICATES AND PROCESSED BY THE NATIONAL CENTER FOR VITAL STATISTICS. CAUSES COME FROM ICD-10 CODES.

10 Leading Causes of Deaths, United States

2013, All Races, Males
Ages: 15-19



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10 Leading Causes of Deaths, United States
 2013, All Races, Females
 Ages: 15-19

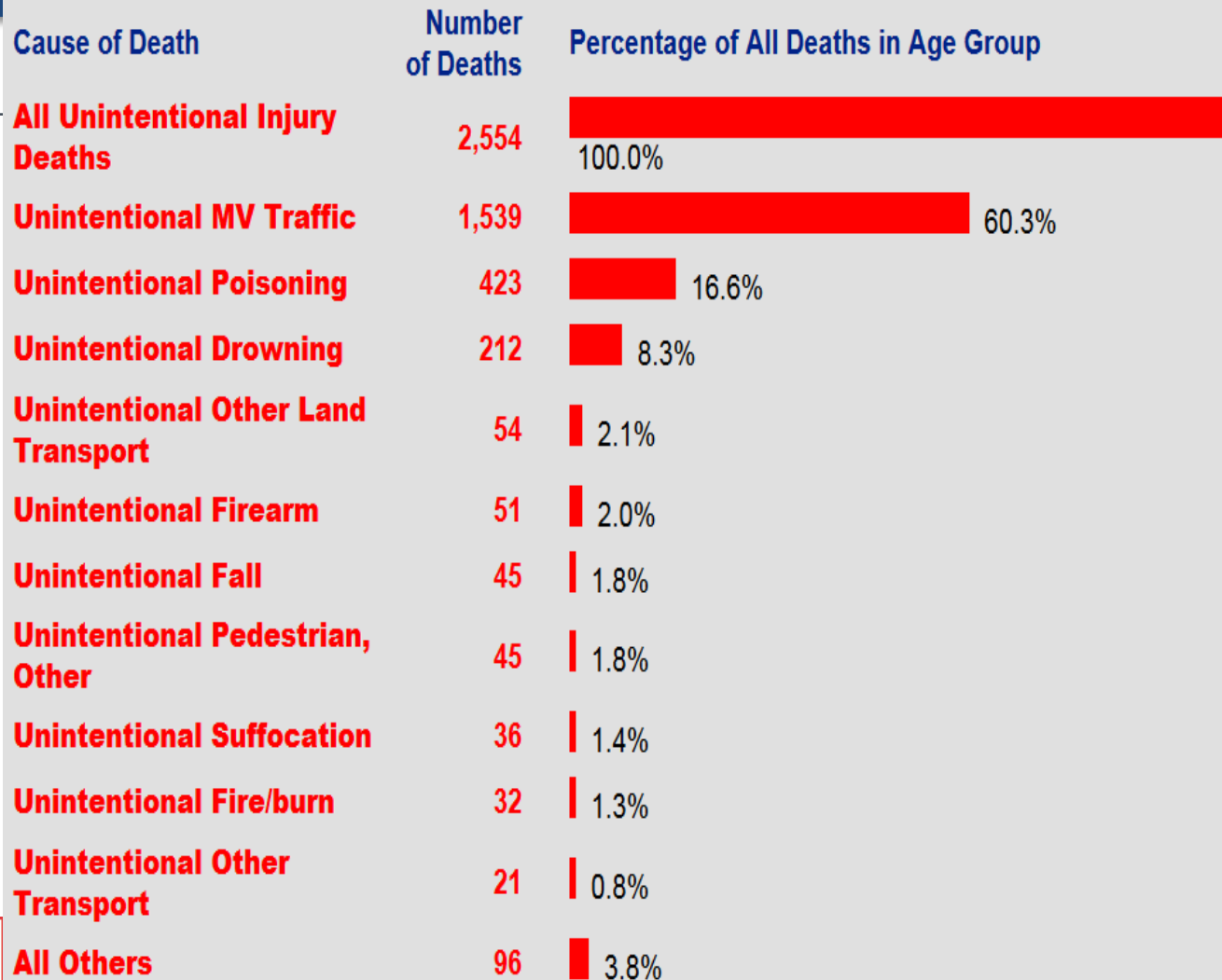
Cause of Death	Number of Deaths	Percentage of All Deaths in Age Group
All Deaths	2,721	100.0%
Unintentional Injury	1,098	40.4%
Suicide	398	14.6%
Malignant Neoplasms	260	9.6%
Homicide	169	6.2%
Heart Disease	105	3.9%
Congenital Anomalies	70	2.6%
Complicated Pregnancy	41	1.5%
Influenza & Pneumonia	32	1.2%
Cerebrovascular	27	1.0%
Chronic Low. Respiratory Disease	22	0.8%
All Others	499	18.3%



10 Leading Causes of Unintentional Injury Deaths, United States

2013, All Races, Males

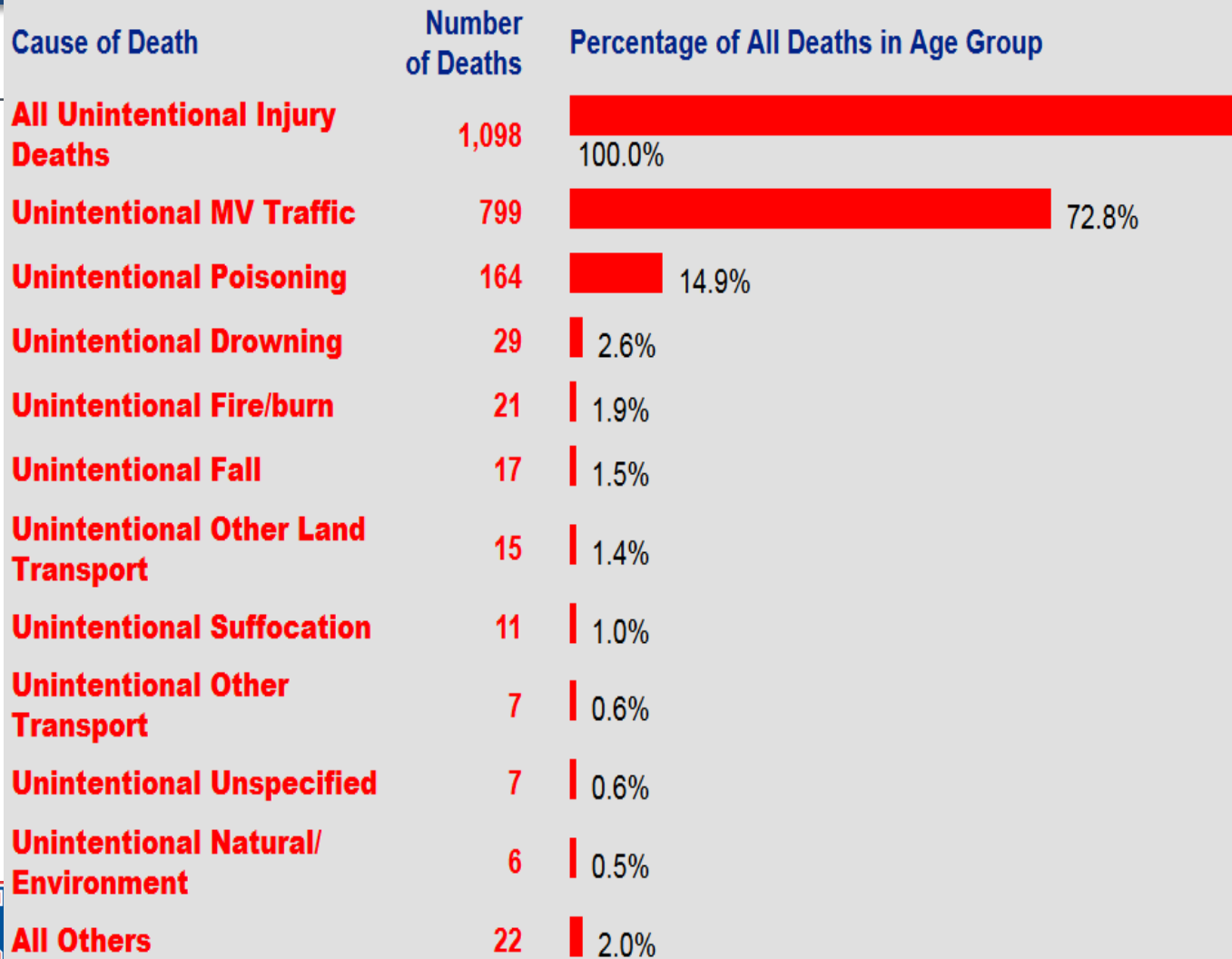
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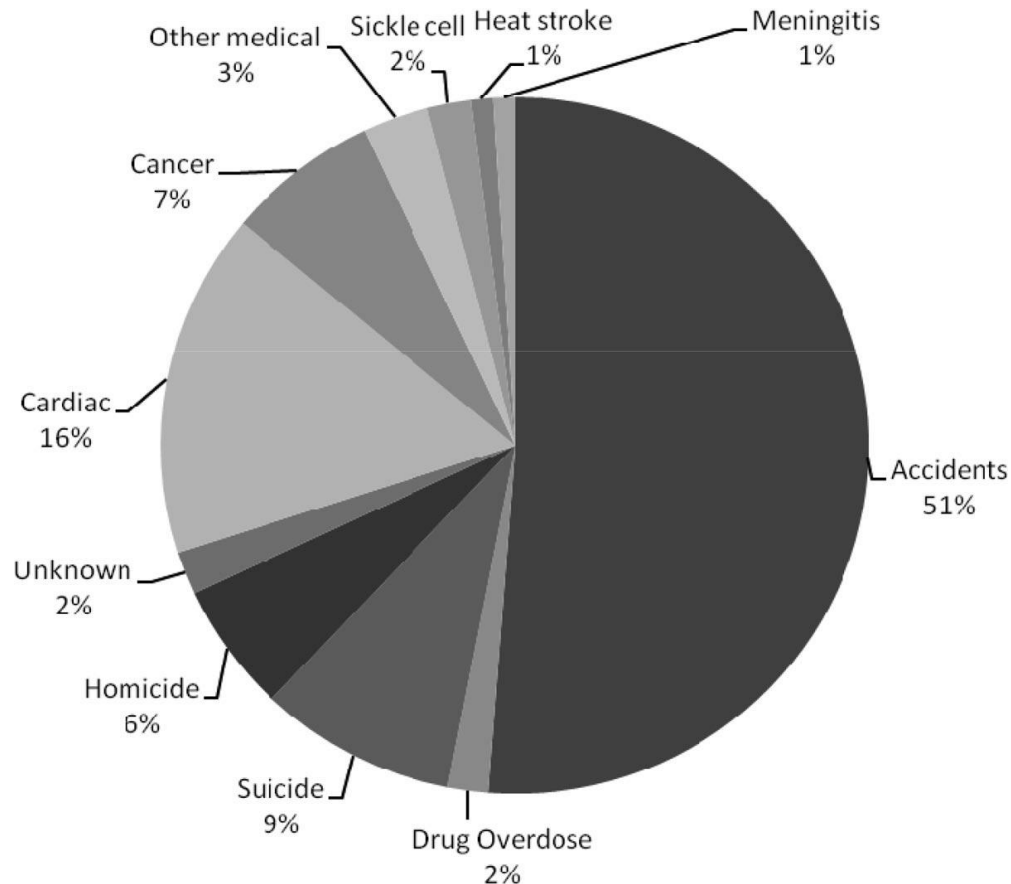
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HOMEMADE SKATEBOARD ROCKET EXPLODES, KILLS STUDENT

THE ASSOCIATED PRESS APRIL 5, 2016, 9:54 P.M. E.D.T

- THOUSAND OAKS, Calif. - Investigators on Tuesday were trying to figure out what caused a homemade rocket attached to a skateboard to explode, killing a Southern California high school student and injuring his friend.
- Bernard Moon, 18, of Thousand Oaks died after the blast Monday night. A 17-year-old had minor injuries and was released from the hospital Tuesday.



HOMEMADE SKATEBOARD ROCKET EXPLODES, KILLS STUDENT

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- The two senior honor students were from Thousand Oaks High School. The blast took place in a courtyard at Madrona Elementary School in Thousand Oaks.
- Moon was a varsity tennis player at the school, an honors student and had been accepted to both the University of California, Berkeley and Brown University, friends said.





WHAT'S OUR ROLE IN OFF-FIELD STUDENT-ATHLETE SAFETY

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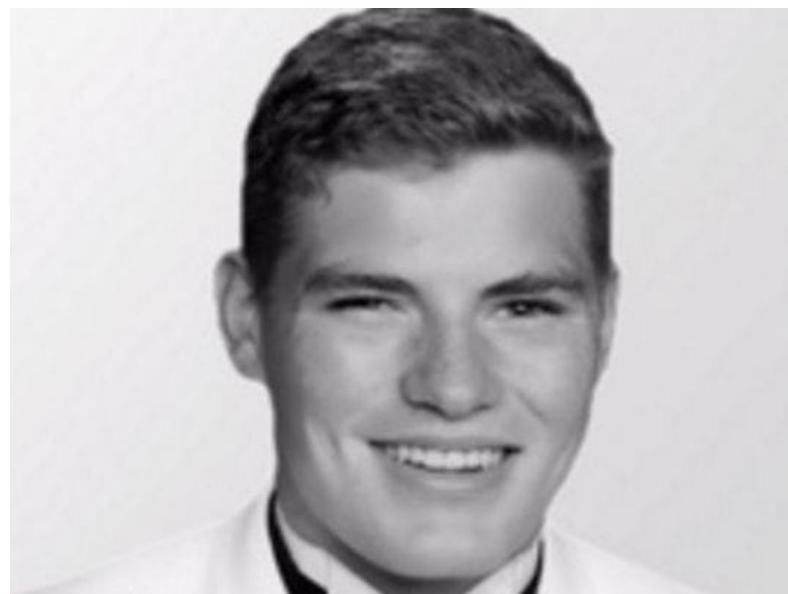
Take Part. Get Set For Life.™

Kevin Charles— DIIA Executive Director
2016 NFHS Legal Meeting
Indianapolis, IN
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Salesianum School senior killed in crash; four others injured

Story Highlights

- Five people were involved in a crash late Friday, March 11, 2016 near U.S. 301 in southern New Castle County, Delaware.
- Authorities have identified one killed as Tyler Brown, 17, a student at Salesianum School.
- The incident involved a pickup and a tractor-trailer and is under investigation.



Classmates, teachers and friends are remembering Tyler Brown, a senior at the Salesianum School in Wilmington, as an outstanding student, **athlete**, artist and dedicated friend.





WHAT'S OUR ROLE IN OFF-FIELD STUDENT-ATHLETE SAFETY

- The NFHS and member states have made tremendous strides on on-field player-safety.
- Still, the greatest threat to student athletes is the car ride to and from practice and contests.
- What's our role in off-field player safety?
 - ❖ No Answers Here. Just Raising the question.





WHAT'S OUR ROLE IN OFF-FIELD STUDENT-ATHLETE SAFETY

- The Sport in America survey found that coaches are a leading positive influence on today's youth.
- Respondents were asked to rate the overall influence of a variety of groups on young people.
- Across all major demographic groups, coaches rank as the number one positive influence on youth today.





WHAT'S OUR ROLE IN OFF-FIELD STUDENT-ATHLETE SAFETY

- **Engaging State or Sport Specific Coaches Associations**
 - ❖ Conversation with DIFCA Officer- Mike Ryan, Head Football Coach, Athletic Director and School Counselor
 - ✓ “Finding a way to reach kids is important.”
 - ✓ “Too much pressure on coaches to do parental things.”
 - ✓ “If you bombard the kids with too much info they will filter.”
 - ✓ However, a “Toolbox for Coaches” with impactful, interactive activities “Would be awesome!”
 - ✓ But not a mandatory program for coaches.
 - ✓ “You won’t save ‘em all but you might reach one kid and that would make it worthwhile.”





WHAT'S OUR ROLE IN OFF-FIELD STUDENT-ATHLETE SAFETY

➤ Engaging State or Local Police

- ❖ Conversation with Tom MacLeish, Supt. DSP (Retired) and a current football official & member of DIAA FB committee
 - ✓ The risk to student athletes while driving is “way beyond anything that happens on the field.”
 - ✓ Regarding involving coaches, “I think it’s a great idea.”
 - ✓ “One small act by a coach might reach the student and save a life.”
 - ✓ Suggested discussing with DSP Traffic Section to find a way to involve DSP Troopers working in conjunction with coaches.
 - ✓ Suggested working with Office of Highway Safety.





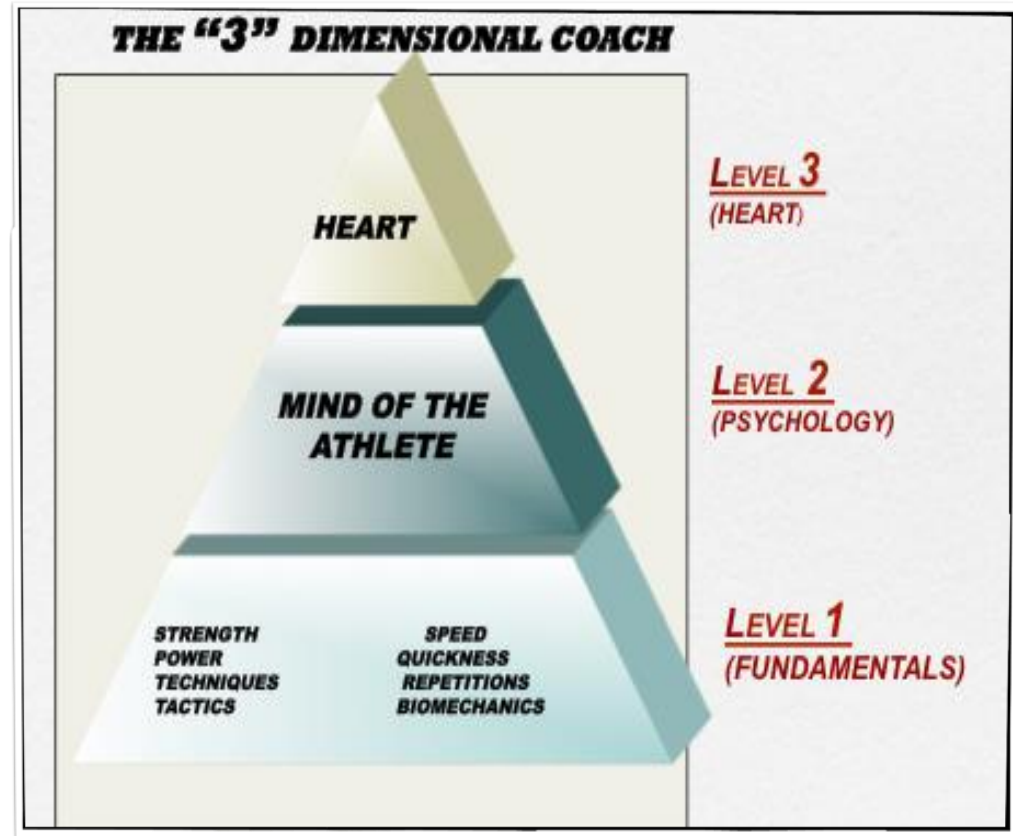
WHAT'S OUR ROLE IN OFF-FIELD STUDENT-ATHLETE SAFETY

- **Engaging Coaches Training Programs & Trainers**
 - ❖ **NFHSLearn.com** – currently don't have a product that addresses this specific topic.
 - ❖ **Delaware Coaches Ed Company- ETA356 Joe Thomson**
 - ✓ 3 Dimensional Institute – coaching the body, mind & heart
 - ✓ “Studies show that coaches always come out on top as influencing of high school aged children.” Greater than parents, siblings, pastor.
 - ✓ Intends to add a unit to ETA356 lesson plan for coaches on subject.



WHAT'S OUR ROLE IN OFF-FIELD STUDENT-ATHLETE SAFETY

- 75% of coaches in America only coach in the 1st---Dimension.
- 15 – 20% of coaches Have a strategy for Coaching in the 2nd Dimension.
- 5 – 10% of coaches have a strategy for the 3rd Dimension.





WHAT'S OUR ROLE IN OFF-FIELD STUDENT-ATHLETE SAFETY

➤ Engaging Highway Safety Campaigns

- ❖ Delaware Campaign – “Run Fast, Drive Slow”

- ❖ Targeted Boys State Tournament Events

- ✓ Attempting to reach 15 to 18 year old males
- ✓ Displays and demonstrations at entrance of venues, PSA's , etc.
- ✓ Not sure of the effectiveness of this approach. Spectators filter too.
- ✓ Partnering Highway Safety with DSP and coaches would seem to be more likely to directly reach the student athlete.





WHAT'S OUR ROLE IN OFF-FIELD STUDENT-ATHLETE SAFETY

Discussion

What's happening in your state
regarding off-field player-safety?

Thank You!

