



NFL MEDICAL AND EMERGENCY PREPAREDNESS

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National Football League**



Health & Safety Gameday and Clinical Team



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ATS, Gameday, Tech
Medical Committees



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AMP, VTML, EAP
International Games



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All gameday programs
and personnel, external research



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Comms, DEI programs



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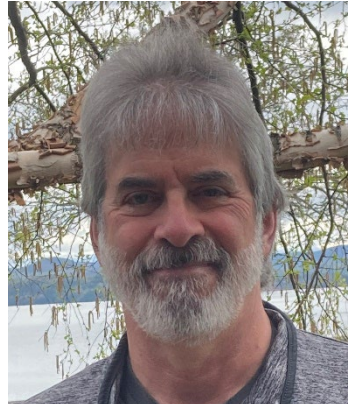
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EMR, DEI, AQI



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EMR, Combine and non-
combine medical



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Dr. Gary Solomon
MRAP, publications,
committees



Emily Myers
EMR, Summit
meeting, COVID



Cady Langdon
EQM, equipment



THE TEAM BEHIND THE TEAM

30 GAME DAY MEDICAL STAFF

ON AVERAGE EACH TEAM HAS:



4 ATHLETIC TRAINERS

Assess and treat player injuries in conjunction with team doctors



2 PRIMARY CARE PHYSICIANS

Evaluate players for general medical conditions and concussions



2 ORTHOPEDISTS

Evaluate and treat players for injuries to the bones and joints



1 UNAFFILIATED NEUROTRAUMA CONSULTANT

Evaluates players for possible head injuries and concussions



1 CHIROPRACTOR

Provides back/spinal adjustments for players and treats muscular injuries

STADIUM MEDICAL TEAM:



2 INDEPENDENT ATHLETIC TRAINERS

Notify on-field medical staff of possible injuries from press box. The independent AT spotters can call a medical timeout to stop the game to have a player receive medical attention



1 RADIOLOGY TECHNICIAN

Takes x-rays of injured players at the stadium



1 OPHTHALMOLOGIST

Treats eye injuries



2 EMTS/PARAMEDIC CREW

Transport players to hospital in the event of serious injuries



1 UNAFFILIATED NEUROTRAUMA CONSULTANT

Monitors broadcast video/audio and notifies on-field UNCS of possible head, neck or spine injuries



1 DENTIST

Treats dental issues



1 VISITING TEAM MEDICAL LIAISON

Local emergency physician certified to practice medicine in the state where the game is being played. The VTML works with the team to provide access to care, medication and first-rate medical facilities



1 AIRWAY MANAGEMENT PHYSICIAN

Provides emergency intubation to severely injured, non-breathing players



- **Equipment**
- **Style of play/rules**
- **Training and teaching**
- **Supervision and medical support**

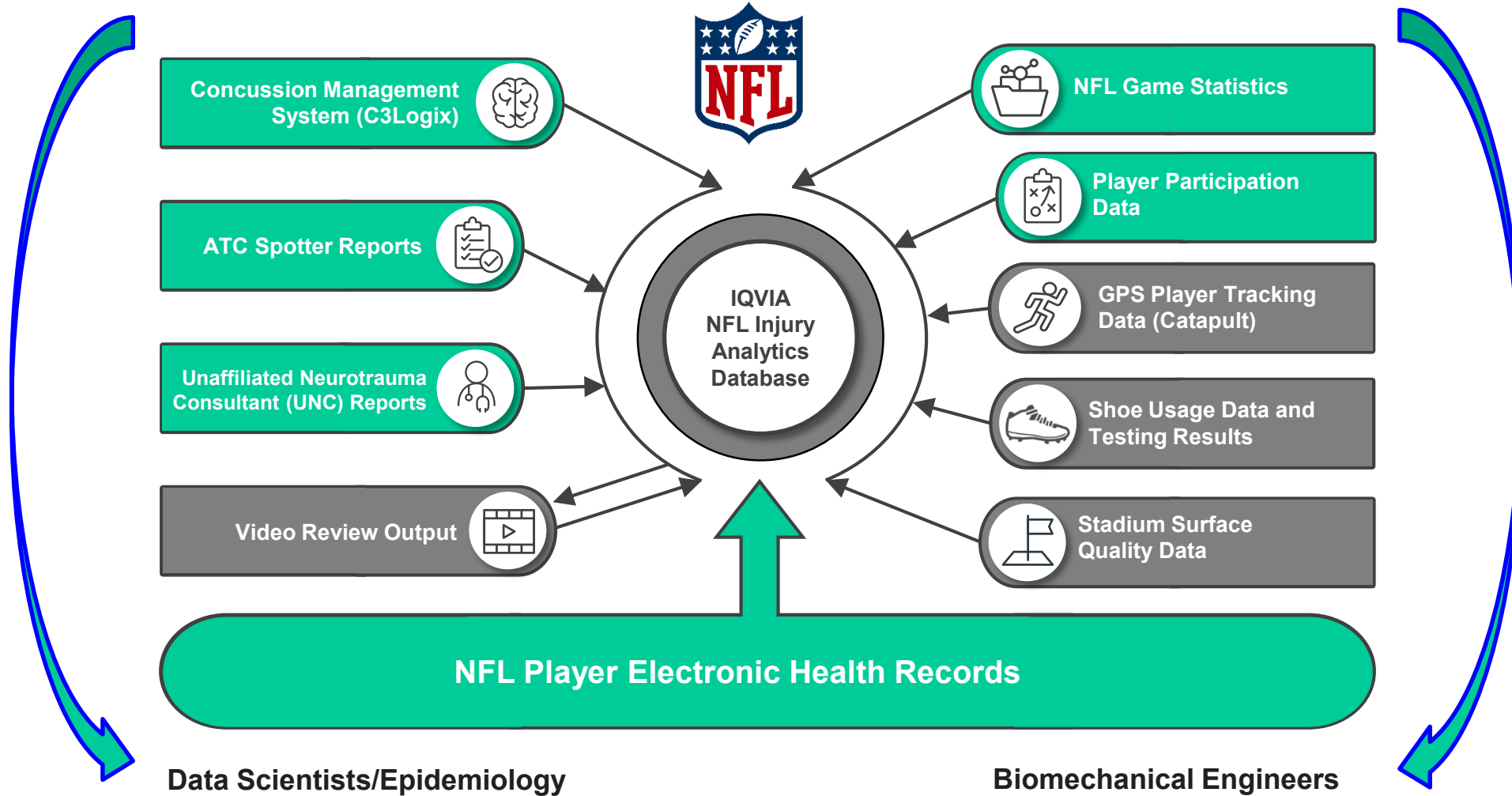


DATA SOURCES



IQVIA

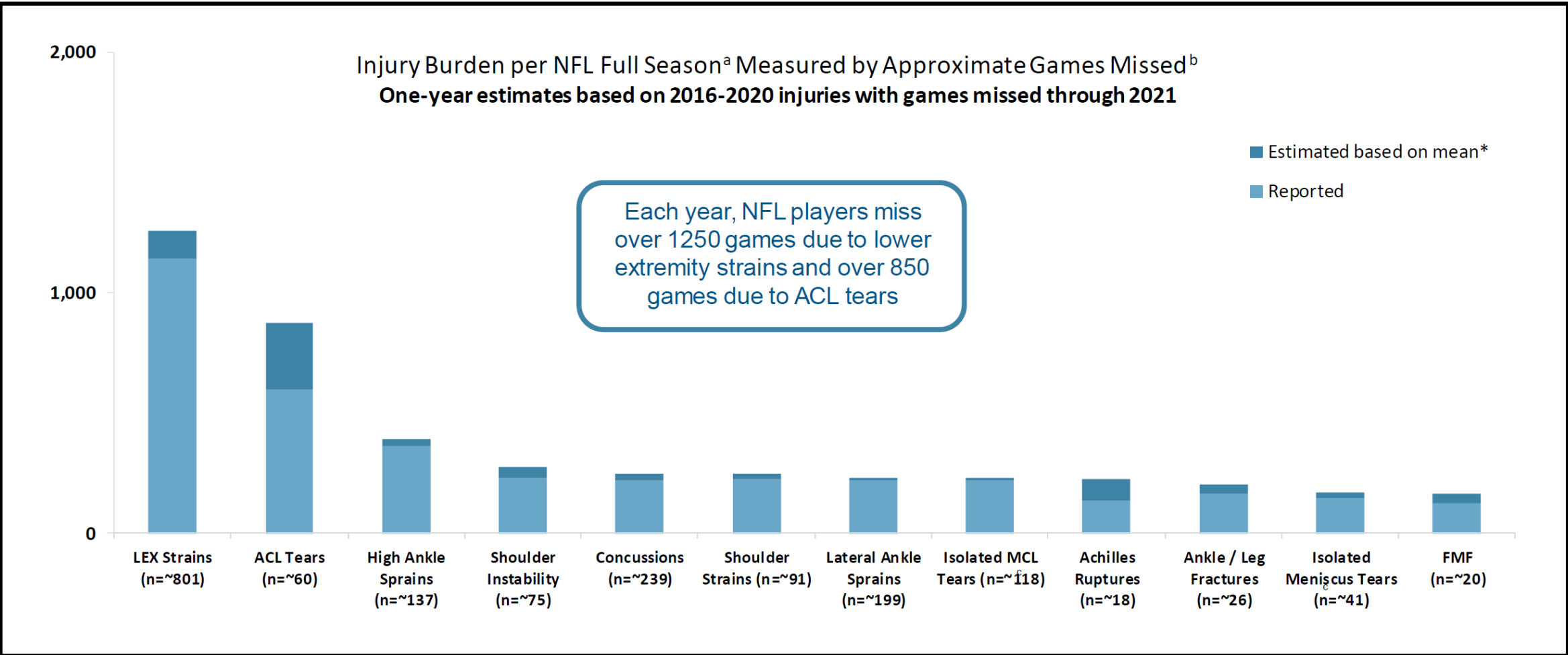
BIOCORE





**Injury Burden – setting
priorities**

Injury Burden



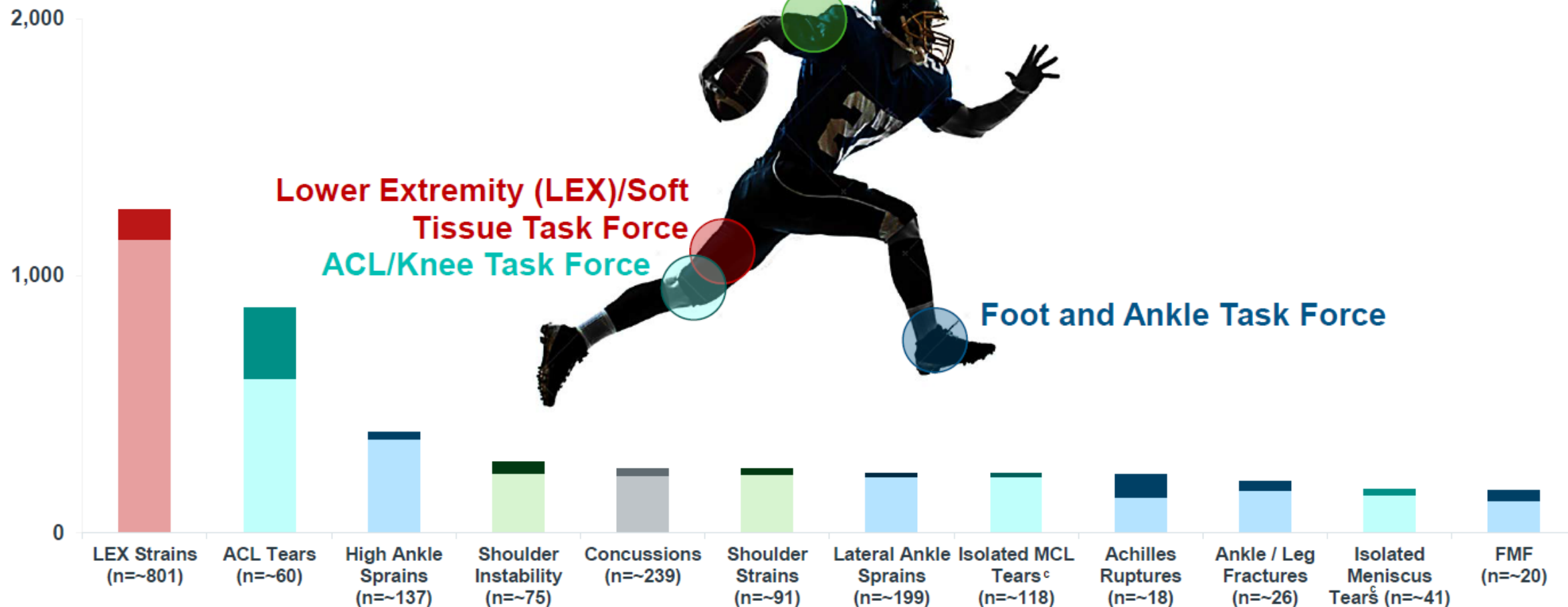
The NFL has created specific task forces to address key injuries

Shoulder Task Force

Lower Extremity (LEX)/Soft Tissue Task Force

ACL/Knee Task Force

Foot and Ankle Task Force



* Return dates are missing for 5-38% of injuries; games missed is estimated by using the mean. These estimates do not take into account football-related and other non-injury related factors for return to play.

^a Total incidence across 2016-2020 within NFL Calendar years in order of chart: 4,006 (LEX Strains), 298 (ACL), 685 (HAS), 377 (Shoulder Inst.), 1,196 (Conc.), 454 (Shoulder Strains), 996 (LAS), 590 (Iso. MCL), 89 (AR), 130 (A/L Fx), 205 (Iso. Meniscus), 98 (FMF).

^b Games missed are approximated, leading to potential inaccuracy of values when players switched clubs, were waived, or put on IR.

^c Isolated injuries are those without concomitant ligamentous pathology and may be accompanied by other non-ligamentous injuries.

NFL EMERGENCY PREPAREDNESS

- **Preparing for the most common life and limb threatening emergencies that happen in American tackle football**
- **It all starts with the written Emergency Action Plan and have a plan for each venue – training camp, practice and stadium on game day**
- **These plans require a review and approval process between NFL Player Health and Safety and the NFLPA**
- **Must be deemed “compliant” with all of the required components of a quality EAP**
- **Must be shared with the visiting team prior to arrival**

REQUIRED SCENARIOS FOR TRAINING/PRACTICE

- **Head Injury**
- **Cervical spine injury**
- **Exertional heat illness**
- **Truncal trauma with hypotension**
- **Cardiac arrest**

EMERGENCY ACTION PLAN TRAINING

- **Supervised training program with an independent third party**
- **Rehearsed with all personnel**
- **Venue specific training so practice with physicians and EMS at stadium training and only ATC's at practice venue scenarios**
- **Hands on training with feedback on performance**
- **Updated when changes are made**
- **Clearly designating the Level I Trauma Center and closest hospital plus other specialty hospitals as needed**



AFTER ACTION REVIEW

- **We review all transports to the hospital**
- **Debrief with involved personnel**
- **Opportunity for self evaluation**
- **What can we learn and do better next time**



NFL GAMEDAY MEDICAL ASSISTANTS (PLUS)

- **AMP – Airway Management Physician**
- **VTML – Visiting Team Medical Liaison**
- **UNC – Unaffiliated Neuro-Trauma Consultant**
- **AT spotters – “eye in the sky” ATC’s who are injury review experts**
- **EMS – highly trained EMT’s and paramedics**
- **Ambulances – 2 player only dedicated ambulances**
- **X-ray – 2 or 3 x-ray technicians**
- **Oxygen – sideline oxygen therapy**
- **60 minute medical meeting**
- **Level I Trauma Center**

60 MINUTE MEETING COMPONENTS

- **Officials introduction and discussion on “medical time out”**
- **Identification of team training and medical staff plus ATC spotters and procedures for communication**
- **Introductions**
 - **Home and visiting team training and medical staff**
 - **UNC’s, AMP, VTML**
 - **ATC spotters, IVRS techs**
 - **EMS personnel**
 - **X-ray tech**
 - **Football OPS**

60 MINUTE MEETING

- **Stadium resources and their location**
 - **X-ray**
 - **Field carts**
 - **Ambulances**
 - **Field personnel (GDA's)**
- **Transportation destinations**
 - **Level I Trauma Center**
 - **Nearest hospital**
 - **Specialty hospitals (spine/neuro, cardiac, ortho trauma)**

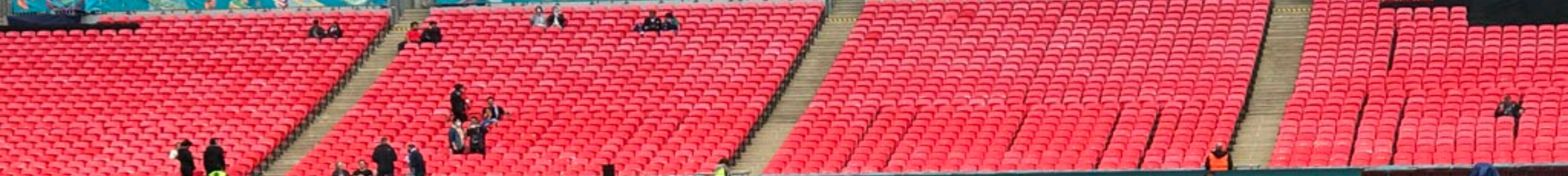
60 MINUTE MEETING

- **Communication and hand signals if radio fails**
- **Who will “close the loop” on a concussion evaluation**
- **Who and how will the team perform a c-spine immobilization or spinal motion restriction if required**
- **Designate the “code leader” in case of cardiac arrest**
- **Exchange player information on weights and allergies for VTML, AMP and x-ray**



NFL INTERNATIONAL SERIES GAMES

- **Same level of expertise and medical care expected**
- **Local partners in London, Germany, Mexico City**
- **US based UNCs and ATC spotters**
- **Portable x-ray unit**
- **Level I Trauma Center equivalents**
- **Scoop stretcher vs spine board**
- **Preparation of equipment removal**
- **Resuscitation room**
- **Local jurisdictional medical standards**



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2022 LEWIS CINE

- **Punt return in one of the London games at Tottenham**
- **Legal hit on the side**
- **Obvious tib-fib fracture**
- **Stabilized on site at the resuscitation room in Tottenham**
- **Destination complicated because of severity of injury and London marathon**
- **Ultimately went to CCL**
- **Surgery went well**
- **Flew home on private medical jet 6 days after injury**




KEYS TO EMERGENCY PREPAREDNESS

- **Practice and plan for these scenarios**
- **Early recognition of emergency situations**
- **Immediate initiation of primary interventions (CPR, etc)**
- **Prompt definitive treatment (defibrillation, others)**
- **Rapid transfer to an appropriate hospital for ongoing care**

Sharing Our Progress


**SIGN UP TO RECEIVE DR. SILLS'S NEWSLETTER AT
WWW.NFL.COM/SILLSNEWSLETTER**




Sharing COVID-19 Lessons with CDC and CNN

Last month, we celebrated our findings and conclusions on the 2021 season, our second successful campaign, and the COVID-19 pandemic. We are immensely grateful to the NFL Players Association, players, medical experts, and biologists, coach and staff for helping us reach this point.

Ahead of Super Bowl LVII, we sat down with Dr. Vinay Gupta of Medial of Correspondent Dr. Vinay Gupta to discuss the strategies that allowed us to safely conduct the season and how those strategies may be applied to society. To watch the interview, see below:



Over the course of the pandemic, we have been proud to collaborate and share information with the medical and



League-Wide Requirement of Guardian Cap Aims to Reduce Head Impacts During NFL Preseason

At the NFL Annual Meeting, the Competition Committee, Health and Safety Committee and all 32 NFL Owners voted and passed a resolution to mandate that offensive and defensive linemen, tight ends and linebackers wear Guardian Cap for every preseason practice up to the second preseason game. Guardian Cap represents a crucial part of our larger efforts to mitigate head impacts and advance the health and safety for our players.

[Read more about Guardian Cap in ESPN](#)

Guardian Cap is a helmet shell add-on device that is worn over the helmet to reduce the severity of head impacts, and is a powerful example of innovation funded through the NFL's Health and Safety Challenge. In 2017, we awarded Guardian Cap \$30,000 in grant funding to help advance the development of its technology and have informed further improvements in the product since NFL data and insights gathered established impact studies conducted by NFL and NFLAA appointed biomechanical engineers.

In 2021, Guardian Cap was selected for laboratory testing conducted by our joint biomechanical engineers.





