



DEATH *as Thousands Cheer*

by Louis Carp, M.D.

Can fatalities and injuries in competitive sports be decreased?

JOE ADCOCK, current first baseman of the Milwaukee Braves, was hero for a day when on July 31, 1954, he hit four nerve-tingling home runs against the Brooklyn Dodgers. Two days later, he was at bat, eager to knock in his next homer. Lusty cheers spurred him on. He suddenly hit the dirt, writhing in pain. A ball, pitched by Brooklyn's Clem Labine had struck him above the left ear. The crack against Adcock's helmet, sharp and loud and startling, could be heard even in the press box high above the plate. As his teammates carried him off the field on a stretcher, an excited and sympathetic murmur

swept through the crowd. Back in the dressing room, Adcock came to, took a shower, and with reassurance from the team physician, was able to go back to his hotel. Fortunately, that helmet saved him, and no serious injury resulted.

Back in 1920, Ray Chapman, short stop for the Cleveland Indians, was at bat without the advantage of today's protective tough fibre helmet lined with a cushion of shock absorbing plastic. He got his head dusted off by the "submarine delivery" of pitcher Carl Mays of the New York Yankees. His brilliant career came to a fatal end without his ever regaining con-

sconsciousness. This is the only recorded fatality on a professional baseball diamond.

Nineteen days after Joe Adcock was hit, Ronald Bernardini, a high school senior, met with tragedy. In a twilight game in the Greater New Haven League, he was beamed by a pitched ball and died the same day from a fractured skull. If Bernardini had been one of the 250,000 in the Little League, safety regulations would have assured him the protection of a helmet.

The plastic helmet is only one of many new methods to protect athletes. But despite such progress,

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there are nevertheless shocking statistics of fatalities in competitive sports. As early as 1865, the Marquis of Queensbury formulated a dozen rules to make "barbarous pugilism" a gentlemen's sport and to satisfy the sensibilities of bewhiskered spectators. But the problem of barbarism is still with us. During 1945-1954, according to the Metropolitan Life Insurance Company, nineteen pros and fourteen amateurs died from boxing injuries.

FOOTBALL AUTHORITIES, alive to all the physical dangers their players were exposed to, organized in 1931 an alert and conscientious Committee on Injuries and Fatalities of the American Football Association, chaired by Dr. Floyd R. Eastwood of Los Angeles State College. That committee is charged with the responsibility for the annual collection and reporting of fatalities and injuries and suggestions for their prevention. From 1931-1955 (excluding 1942, a war year during which statistics were not kept) there were 419 direct and 201 indirect (infection, heart failure, hernia, pneumonia) fatalities for a total of 620. High school playing took the greatest toll: three hundred and sixteen! Then followed in order sandlot, pro, semi-pro and college football—the last for a total of 61. Head injuries caused a little more than half the deaths. Belly and spine injuries were close seconds.

Accurate fatality statistics for the whole nation are not available for baseball. Nevertheless, the Metropolitan Life Insurance Company estimates that there are more deaths in baseball than in any other sport because it is played by the largest number.

According to Sterling Young, secretary of the Jockeys' Guild, there were between 1945 and the first half of 1956, forty-three fatalities among jockeys in action.

Dan Parker, sports columnist who has carried on an aggressive campaign against unnecessary fatalities and injuries, once said to me, "Particularly in boxing, there is a tendency to relax on rules when there has been a spell in which there have been no fatal accidents. Then comes the inevitable fruit of such carelessness, another fine young athlete killed, and the rules are tightened up again. Death hovers over every sport arena in which there is rough bodily contact."

What can be done to prevent fatalities? As long as sports are rough and competition is keen, athletes can force themselves beyond their physical potential, to say nothing of the accidents inherently possible in many sports.

Let's look at the record. What can experience teach us?

A roaring crowd at a fight will yell for the "kill" as one of the contestants hits a near helpless opponent with everything in the

book. That crowd wants to see a KO and nothing more. But when there is a kill, without premeditation of course, a shocked public gets something to think about.

LET'S TAKE middleweight Lavern Roach, who stopped fighting in the early part of his career to shoulder a gun as a Marine in World War II. He went back to boxing after the war, and by the time his swift progress toward the top of the ladder came to an abrupt and tragic end, he had notched twenty-seven victories in thirty professional bouts, with ten KO's to his credit. On February 23, 1950, he took on George Small. A blow to the midsection, and then to the head in the tenth, sent Roach reeling. There was a loud thud as the back of his head bounced off the hard canvas floor. The referee motioned Small to a neutral corner and began counting. With an automatic attempt to rise, Roach sat up in a daze, supported lightly on his gloves, hunched, helpless, glassy-eyed. It looked like just another KO. Finally, his sagging body was lifted to its feet and aided to its corner. The fight over, Roach walked to his dressing room and took a shower. In about a half hour, he became unconscious and was rushed to a hospital. Next day, the news of his death from the injury was announced nationally over the radio and in the press. Official investigation followed. The Medi-

cal Examiner pronounced the death accidental and the New York Grand Jury ruled that there was no negligence. Today there is beneath the platform canvas a two inch thick resilient mat which is a combination of foam plastic and celotex. This absorbs skull impact. Ring posts today must be so placed as to be outside the ropes.

STATE Boxing Commissions are taking constructive steps to make the sport safer. Boxers with chronically poor records can't have their licenses renewed. Pro fighters are thoroughly examined before a match. If previous head injuries have bashed the gray matter around, this can be detected by what is known as an electroencephalogram, which traces abnormal brain waves. Should they occur, a fighter is barred from future ring activity. Any doubt about the strength of a heart is checked by an electrocardiogram. In selected cases there is consultation with specialists. Referees, usually chosen from among retired boxers, must know the score and be alert and have the judgment to know when to stop a fight. Other precautions have been taken. There's a new model rubber mouthpiece, designed to protect the upper and lower teeth and keep the lower jaw from sliding sideways, at the same time permitting the mouth to open and close easily.

In championship bouts, leather-

pushers do their stuff with six ounce gloves; otherwise the weight is stepped up to eight. Mitts get the onceover. Referees have their eyes peeled for deplorable old tricks that heighten the sting of a blow and the chances of a haymaker—plaster of paris bandages wrapped around a fighter's hands, for instance, or tin or slugs fastened onto the knuckles with tape or concealed in the gloves. Modern gloves are so constructed that the thumb is bent into the palm. This device stops a boxer from poking a gloved thumb into the eye of an opponent. Tiger Flowers, middleweight champ, suffered from such an injury. He had his eye operated upon in 1927, and died.

Seconds had a habit of giving fighters extra pep with whiskey or drugs. Now they can use only aromatic spirits of ammonia. The old coagulant, Monsell solution, too often caused a caking blood clot, beneath which infection could easily develop. Now, milder coagulants, such as thromboplastin or adrenalin, have taken its place. After a knockdown today, a fighter must take advantage of the mandatory count of eight, during which his opponent must go to a neutral corner. He can no longer stand over him, ready to continue battering as soon as he's up. By mutual agreement pros can waive the eight count rule. And three knockdowns in any one round means a TKO. A knockout, a severe beat-

ing, a cut eye, all call for an automatic suspension for at least one month.

ON THE NIGHT of June 26, 1952, Sugar Ray Robinson, in the pink of condition, fought Joey Maxim for the light heavyweight title at Yankee Stadium. The bout was scheduled for fifteen rounds. When the fighters climbed into the ring at 10 o'clock, the temperature in New York City according to the United States Weather Bureau was 92 degrees and the humidity 55 per cent after a scorching 97 degree day. Robinson had taken eleven rounds, but in the fourteenth, with no letup from the heat and humidity, the bell tolled for Sugar Ray. He was wilted and in a state of collapse and the fight was over by a TKO. Even Ruby Goldstein, the fast moving referee, had fainted in the eleventh and was replaced. Fortunately, Sugar Ray didn't die. Do we need to wait for a fatality in the ring from heat exhaustion before we do anything about it?

A bad practice had sprung up among boxers who, after an automatic suspension because of injury, nevertheless barn-stormed and fought in other states under assumed names. That racket is over. Now, every pro must carry and show his personal record before he is permitted in a ring.

It was not unusual for seconds to appear in dirty sweaters or

shirts. While they are not expected to dress like dandies, cleanliness is essential; and laundered white sweaters must now be worn. Their hands must be clean. Cotton applicators for use between rounds on cuts around the face, may no longer be rolled by their own fingers. They must all be sterilized, straight out of a cellophane wrapper.

At the United States Military Academy at West Point, steeped in glorious athletic tradition, there stands on Flirtation Walk a grim reminder of a football fatality—The Sheridan Memorial. Its inscription reads: "Life is the greatest game of all. Play it with courage, wisdom and loyalty." One might add: Life is more valuable than any other game!

Richard Brinsley Sheridan, Jr., a 21-year-old Cadet, was playing end in the Army-Yale football game at the Yale Bowl on October 24, 1931. After an Army kick-off, Bob Lassiter, Yale's fast back, took the ball and started down the field with his high-knee action. Sheridan made the first tackle head on. Lassiter's knee hit the back of Sheridan's head, and he went down and lay motionless. He was rushed to a hospital, where he died two days later of a broken neck. Such tragedies are not always preventable.

However, there are important problems that can be dealt with and solved. Even sixty-minute iron men had a tough time warding

off the powerful and devastating machine-like onslaughts in the days of the now obsolete and prohibited flying tackles, flying wedges, line hurdles feet first and tandem plays.

AT THE Cornell Aeronautical Laboratory, Edward R. Dye has carried on research of a high order on the physical factors responsible for impact injuries to the skull and brain, and on the efficiency of helmets. As a result of his findings, the shell of the modern helmet is made of hard plastic material or fibre and its suspension lining of various types of foam plastic, which tends to absorb shock. Many teams are using helmets with an oval bar strip of unbreakable transparent plastic, an inch and a half wide and a quarter of an inch thick, riveted to the helmet earpieces, and extending horizontally in front of the wearer's face at mouth level. The device is an improvement on the "bird cage" type of metal mask which is heavier and interferes with sight lines.

Today, the same principle of shock absorbing plastic is used in the manufacture of body pads as is used in the helmets.

Recently, Syracuse University took a page out of the book of the boxing fraternity. Their players wear specially moulded plastic mouthpieces, which are expected to lessen staggering dental costs, broken jaws, and head injuries.

The official football rules add an-

other chapter to prevent injuries. No player can enter a game with illegal equipment which can endanger or confuse his opponents. These include sole leather or other hard or unyielding substance on the limbs of any player, no matter how covered or padded. And players can't have metal projections from their clothing or person or chippable cleats. Tape or any other bandage on a hand, unless used to protect an injury, is also outlawed.

Lou Little, who retired as Columbia coach in December 1956 after 25 years on the job, has emphasized the importance of improved techniques in teaching fundamentals, blocking, and tackling. He even insists on routine testing for depth perception and peripheral vision. Other important recommendations are thorough physical examinations, at least three weeks of preseason training, prohibition of scrimmage until after six days of fundamentals and adequate warming up before a player enters a game.

It is understandable that football accidents are at a high during October. I would attribute this to extremely hard play early in the season without proper conditioning. Reliable statistics show that the most hazardous moments of the game occur during the third and fourth periods and during the first five minutes of play, this probably induced by inadequate warming

up. During 1952 and 1954, better than a third of the fatalities occurred in front of the line of scrimmage, while only about a fifth occurred behind the line of scrimmage. In view of these observations, what new rules have been promulgated to cut down these accidents? Should rest periods between quarters be extended from two to five minutes?

It's not unusual to see a football player fail to carry out his assignment after a good crack in the head. He's plain dizzy. Incomplete recovery from an injury makes it mandatory to put a player on the sidelines, despite his protestation or that of the coach. Heroic or expedient participation under such circumstance makes a player more vulnerable to injury.

Jockeys are in a profession which has its special dangers and hazards. Jockey Edward Danhauer had been around tracks since boyhood under the watchful eye of his father who was a trainer and jockey agent. At the age of sixteen, Eddie was ready to don his riding silks, and although he had no real claim to distinction, he enjoyed almost continued success over a period of seven years. On January 29, 1953, his 111 pounds were on White Boots in the fifth race at Sunshine Park, Oldsmar, Florida. Down the backstretch, he was trying to bring his mount to the leaders, when White Boots took a bad step, fell over and threw Eddie to the in-

side. Onrushing and closely grouped horses couldn't avoid trampling him. He was bleeding and unconscious, and was rushed to a nearby hospital, where he died shortly from internal injuries, fractures of the left arm, and from possible fractures of the skull and spine. White Boots had snapped a front leg. He was destroyed. Perhaps this was another unpreventable tragedy.

But racing authorities have done their share to prevent serious accidents at race tracks. Horses are carefully checked by veterinarians. A jockey, who applies for a license as an apprentice after at least one year of race track experience, undergoes complete physical examination. First aid stations at tracks, supervised by physicians, are well equipped. Even plasma and blood for emergency transfusions are at hand. Each race is recorded on motion picture film to enable riders to profit from past mistakes. The films also provide officials with a slow motion record of how each horse runs and enables them to detect rough riding for which patrol judges exercise severe penalties.

NOTWITHSTANDING occasional fatalities and serious and minor injuries, there is probably no country in the world where competitive sports play so important a role in exercise, recreation and professionalism as in the United States. Par-

ticipation in these sports causes fractures, dislocations, sprains, cuts, bruises and concussions. Some of the injuries go on to permanent disability; in others it is not uncommon for death to follow from either direct or indirect causes.

The Metropolitan Life Insurance Company has compiled some interesting statistics. New York City, for example, had an average of three deaths a year from sports during the past thirty years. Baseball, football and boxing were responsible for over four-fifths of these deaths.

In major league professional hockey there had not been a death since 1937. In professional basketball, there is no record of a fatal injury in the game. In soccer, only

one death on the field (from a heart attack) has occurred in four decades. One of the newer sports, roller derby, with about one hundred finalist skaters a year in competition, has not been responsible for a skating fatality since its inception in 1935.

A HUMAN life is not a cheap commodity. It is therefore incumbent on coaches and trainers, backed by the decisions of competent physicians, to exercise continuous vigilance and point the way to greater safety. The regulation of competitive sports should be in the hands of men big enough to give precedence to the health of athletes rather than to spectacle and money.

Some sports fatalities and accidents are preventable. How?

1. Careful physical examination to exclude those with physical defects.
2. Good physical condition to insure that the competitor can reasonably meet the hazards of the sport.
3. Proper training for good coordination and timing without which an athlete is more liable to injury.
4. Equitable matching of sportsmen.
5. Withdrawal of athletes unfit to continue in a match or game because of injury of any magnitude, extreme fatigue, concussion, heat stroke or heat exhaustion. No heroics. Decisions and recommendations by skilled physicians in injuries and health must not be overruled by coaches, managers, trainers, or any with a vested interest in the success of an athlete.
6. Invoking and enforcing rules to cut down injuries.
7. Adequate equipment and good maintenance of playing fields.
8. Adequate supervision and leadership by coaches, trainers and managers.
9. Continuous research in protective equipment.
10. Constructive rule revision.
11. Adequate sanitation.

*The rock engineer, toughest of all the
mountain climbers, plays a dizzy game
with death*

Why Climb a Mountain?

by Ted Dutton

ZUMIE'S THUMB is a smooth stalagmite jutting up like a lighthouse from the precipitous east face of Longs Peak in the Colorado Rockies. Zumie's 100-foot flanks have been climbed, but not often, and not by ordinary mortals. You don't "do" Zumie's with footwork alone. Dangling in slings and driving pitons, you "construct" a route as you go.

Such heart-stopping shenanigans are the exclusive province of American "rock engineers"—the toughest, boldest mountain climbers in history. These human mountain sheep storm "unclimbables" with ferocity and mechanical inventiveness. They search for smooth, vertical cliffs and glassy overhangs considered suicidal by ordinary mountaineers. Their rucksacks bulge with "hardware"—mechanical aids enabling them to hammer and hoist their way to the top.

Why do they climb, these super cragsmen? "To get to the top," they explain. This is like Harold Vanderbilt's classic come-back, when asked what it cost to run a yacht. "If you have to ask," said the millionaire, "you can't afford one." The perfect squelch!

Actually, you either think rock climbing is good clean fun or you don't. The sport, detractors say, is for lunatics. But many rock engineers are college professors or professional men—mature, sensible folk, with a keen sense of values.

Before you decide to join them, consider the fact that a human body falls at about 360 m.p.h. At that rate, it takes three seconds to drop to the sidewalk from the top of a three-story building.