## SKRYPCHENKO I. T.,

Head Department of Physical Education and Tactical & Special Training, Dnipropetrovsk State University of Internal Affairs, Ph.D., Associate Professor (Dnipro, Ukraine) **SCHASTLYVETS V. I.,** Lecturer, Department of Physical Education and Tactical & Special Training, Dnipropetrovsk State University of Internal Affairs (Dnipro, Ukraine) **BOJAN BJELICA,** Vice Dean for Education, University of East Sarajevo, Ph.D. (Sport and Physical Education) (Bosnia and Herzegovina)

## **INJURIES IN OLYMPIC AND MASS SPORTS**

Скрипченко І. Т., Счастливець В. І., Боджан Б. Травматизм в олімпійському і масовому спорті.

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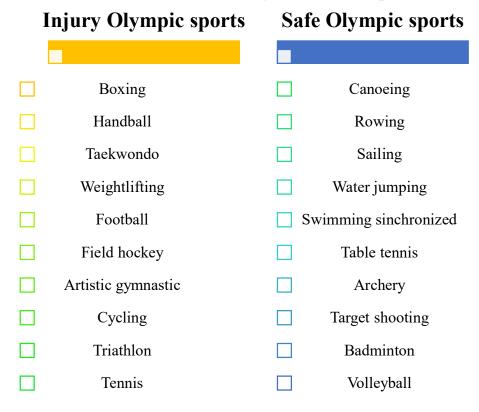
Sports medicine pays great attention to the problems of injury in sports; however, the number of sports injuries is steadily increasing and has now reached catastrophic proportions. In various countries of the world, the number of injuries in sports varies between 10-17 % of all injuries.

Literary studies show that every tenth athlete who participated in the Olympics in Beijing was injured.

The International Olympic Committee has compiled a rating of the most dangerous and safe sports of the Summer Olympics in Beijing. Athletes competing in boxing suffered the most injuries, while canoeing was less traumatic. In total, 1,055 athletes were injured in the Olympic arenas, and this is 9.6 % of the total number of participants in the competition. According to the results of the research, most often they injured their legs (55 %), hands (20 %), torso (15 %) and head (10 %).

Research by scientists shows that all contact team sports are characterized by a high level of trauma [1]. Among them, football is the most dangerous in the world. In terms of the number of sports injuries, football players are significantly ahead of all others [2]. So, according to English studies, 63.3 % of football players have ever been injured. Among swimmers, for example, only 28.1 % were injured. Sports gymnastics can be put in second place with confidence. Even if you recall any Olympic games, there was practically not a single gymnast who did not undergo at least one operation during his career. When practicing this sport, upper limb injuries occur more often (70 % of all injuries). Most of the rest are characterized by lower limb injuries, for example, in athletics and skiing (66 %). Injuries to the head and face are followed by boxers (65 %), fingers of the hand by basketball and volleyball players (80 %), elbow joint by tennis players (70 %), knee joint by football players (48 %).

If we are not talking only about the Olympic sports, then the doctors consider martial arts, auto, motorcycle, bicycle sports and various flights: hang gliders, paragliders, and parachutes to be the most trauma hazardous. Moreover, the greatest number of fatalities occur among amateurs, not professionals.



## Fig. 1. Injury and safe Olympic sports

Facts about «sudden death syndrome» are found among statistical data on sportsmen's injuries. According to doctors, football players, track and field athletes and boxers are most often exposed to it during competitive activities. The conclusions of many specialists boil down to the opinion that everything is to blame for overloading and poor-quality medical examinations.

In sailing, injuries most often occur due to difficult weather conditions [3]. You can slip on the ship or hit parts of the yacht. In addition, athletes suffer from calluses on their hands due to hypothermia, sunburn, and sea salt.

The most frequent injuries among beginners are bruises and concussions when hit by a boom (this is a horizontal mast tree, one end of which is movably fastened to the lower part of the mast). The turn of the yacht is always accompanied by the transfer of the jib from side to side, it is at this moment that the unpleasant meeting of the head and the jib occurs. A strong blow can easily send a beginner overboard. If we consider the reasons that lead to the development of traumatism, then there are several of them. First, this is an increase in loads. After all, the results shown by today's generation are an order of magnitude different from those demonstrated by our predecessors. And the game types have become more forceful, and contact based. And as a result, in pursuit of higher results, athletes resort to doping. And because of it, the muscles often develop disproportionately and do not match the strength of the musculoskeletal system. As a result, athletes tear ligaments and break bones with their own muscles.

Also, the causes of injury are related to the organization of motor activity in the field of physical education and sports. Among them, the most common are:

1) shortcomings and mistakes in the method of carrying out the work;

2) lack of busyness and competition in the organization;

3) shortcomings in the material and technical provision of busy and competitive;

4) unfavorable meteorological and sanitary conditions during training and competitions;

5) violation of medical control requirements;

6) indiscipline of participants in physical and sports activities.

Let's consider the specified reasons in more detail.

Internal causes of sports injuries include:

1) states of fatigue, overfatigue and overtraining, as well as prodromal states. They cause a disorder of coordination, a decrease in attention, protective reactions of the body. In the muscles there is an accumulation of decay products, which negatively affects the strength of their contraction, stretchability, relaxation;

2) the presence of chronic foci of infection in the body;

3) individual characteristics of the body (for example, adverse reactions of the body to physical exertion, neuroendocrine reactions, inability to complex coordination exercises, tendency to spasms of blood vessels and muscles, excessive pre-start fever) [4];

4) breaks in sports (after vacations, illness, etc.), which leads to a decrease in the functional capabilities of the body and its physical qualities.

It is important for teachers, sports doctors, and participants in physical activity to take them into account in their practical activities.

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