"Home of the Golden Knights"



Union School District

UNION HIGH SCHOOL

354 Baker Street Suite 1 RIMERSBURG, PA 16248-9211

PHONE: 814-473-3121 FAX: 814-473-8201

UNION JR/SR HIGH SCHOOL INJURY WARNING

TRACK AND FIELD

Track and field is a sport which can be both the safest and most dangerous of organized sports on the grade school, high school, and college levels. The twenty individual and team events have different characteristics and are performed at different sites. Thus it is mandatory that the coach/teacher/organizer be familiar with all the events and be aware of potential risks in each. The determining factors in the safe execution of each event include the proper use of well maintained equipment, knowledge of correct techniques by coaches and athletes, appropriate supervision, and properly organized practices and competition.

The twenty different events in track and field should be divided into three main areas: throwing, jumping, and running. Each area involves different kinds and degrees of risk, and only a few of the total number of events are of major concern with respect to catastrophic injury. Throwing events involve an airborne phase of the athlete, and running events can require a large proportion of training to be done away from the direct supervision of the coach, for example distance running.

Possible Catastrophic Injuries

Most accidental catastrophic injuries that occur during participation in the throwing events include injuries involving impact of airborne projectiles: concussion, skull fracturing, and stabbing wounds. The distance covered by the implements, their speed, and the unpredictability of their landing are the main reasons why throwing events are dangerous. In the hammer throw, the maintenance of the implement is of major concern. The lack of awareness of the environment on the part of participants and spectators combined with the fact that in track and field a number of events are taking place at one time generates risk. Athletes, coaches, and officials, and on occasion a spectator, become so involved in their own activities that they lose perception of the potential from other activities. Very often people cross the throwing sectors without realizing what they are doing.

Vertical jumping events include an airborne phase and a landing phase which can place vital body parts in a position vulnerable to injury at impact. The major risks in these events involve landing on the head, which can cause severe damage to the nervous system, the spinal cord, and/or broken neck due to a technical error in the execution of the event. Inappropriate, insufficient, and poorly maintained equipment (combined with erroneous technique) is also a common cause of catastrophic injuries (e.g. landing pit not large enough resulting in the athlete missing the landing pit completely, or the vault pole breaking because it is not stiff enough).

The basic exercises for bar clearance and appropriate movements in mid-air and landing are:

1. Mobility drills mainly at hip level.

2. Acrobatics on mat, and agility exercises related to jumping.

3. Standing facing away from the pit with the bar slightly above hip level, the athlete takes off powerfully from both feet. The hips are extended and brought up and forward (arching) while legs are kept hanging loose. The arched position is maintained until the hips have cleared the bar. Then the hips are flexed, legs are lifted up, and the head is tucked achieving an L-position with the body. (The head is never thrown back while going over the bar. The head is turned towards the shoulder on the same side as the lead leg.)