## Olivet Nazarene University Intercollegiate Athletics

Policy: Concussion Management Plan Date: 1/31/2018 Responsibility: Athletic Training

**Purpose.** The Olivet Nazarene University Department of Intercollegiate Athletics is committed to the safety and well-being of its student-athletes. It is committed to the prevention, identification, evaluation and management of concussions. Therefore, the Department of Intercollegiate Athletics, in accordance with NAIA policy for institutions, has adopted a team physician-directed Concussion Management Plan for its student-athletes who exhibit signs, symptoms or behaviors consistent with a concussion. The plan addresses the removal from practice or competition, evaluation by an experienced health-care provider and the criteria for medical clearance to return to activity. Student-athletes are required to sign the ONU Assumption of Risk statement which outlines potential head injuries by participating in intercollegiate activities.

**Definition of Concussion.** In accordance with the 3rd International Conference on Concussion in Sport (2008), a cerebral concussion is defined as a complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces.

Common elements of concussions include:

1. May be caused by a direct blow to the head or elsewhere on the body with an 'impulsive' force transmitted to the head.

2. Typically result in a rapid onset of short-lived impairment of neurologic function that resolves spontaneously.

3. May result in neuropathological changes, but acute clinical symptoms largely reflect a functional disturbance rather than structural injury.

4. Result in a graded set of clinical symptoms that may or may not involve loss of consciousness.

5. Resolution of the clinical and cognitive symptoms typically follows a sequential course, but post-concussive symptoms may be prolonged.

6. No abnormality is evident on standard structural neuroimaging studies.

## Signs and Symptoms of Concussion.

Concussions may cause abnormalities in clinical symptoms, physical signs, behavior, balance, cognition, and/or sleep. Signs and symptoms of concussions include, but are not limited to:

HeadacheInLoss of consciousnessDVisual disturbancesFeConfusion or disorientationRAmnesiaInDizziness or balance problemsESlurred or incoherent speechFaNausea or vomitingEVacant stareS

Inability to focus Delayed verbal or motor responses Feeling like 'in a fog' or dazed Ringing in ears Irritability Emotional Fatigue or feeling slowed down Excessive drowsiness Sleep disturbances

**Evaluation.** Any student-athlete exhibiting signs and symptoms of a concussion will be **immediately removed from play and evaluated by a physician or certified athletic trainer.** A physical and mental status examination will be performed by the athletics healthcare provider and any student-athlete diagnosed with a concussion **shall not return to activity for the remainder of that day.** An on-site evaluation will include a modified SCAT 5 protocol. The student-athlete will be serially monitored for deterioration and will be provided with written instructions if discharged home after suffering a concussion.

**Referral to Emergency Department.** Appropriate activation of the on-site Emergency Action Plan will occur for any student-athlete exhibiting focal neurological deficits, progressive or worsening signs and symptoms, and/or signs and symptoms of associated injuries (e.g. severe/unstable neck injury).

**Physician Referral.** Student-athletes who experience a concussion associated with loss of consciousness, worsening signs/symptoms, and/or post-concussive signs/symptoms lasting greater than 24 hours will be referred to a physician and will not be allowed to return to activity until cleared by the physician.

Academic Supports/Center for Student Success. If an athlete displays complications with school work or there is a concern from the physician evaluation that assistance may be necessary and inquiry will be sent to Center for Student Success for notification to Professors to engage in further assistance with the specified student.

**Return to Activity.** Student-athletes suffering a concussion must be sign/symptom free at rest for a minimum of 24 hours before starting any exertional activity. Each day a university health care provider will review symptoms with the concussed athlete to check for progressing/deterring symptoms. Student-athletes will complete the following protocol in sequence before returning to full activity. The student-athlete must remain sign/symptom free for 24 hours following each step before progressing to the next step. If signs/symptoms occur during a step, the student-athlete will revert back to the previous step for a minimum of 24 hours before attempting the progression again. Before a student begins the contact phase a neurocognitive screen must be passed in addition to being symptom free.

- Step 1: Aerobic Exercise/Stationary Bike (20 min/no sweating)
- Step 2: Moderate Aerobic (30 min/sweating)
- Step 3: Sport Specific Training/Lifting
- Step 4: Full Exertion non-contact training
- Step 5: Full Contact training
- Step 6: Game/Competition

**Post-Concussion Testing.** Student-athletes involved in sports with an increased risk of concussion (i.e. baseball, basketball, football, pole-vaulting, and soccer, etc..) will undergo pre-participation baseline neuropsychological testing using the IMPACT testing system. Post-concussion testing will be performed and compared to baseline values in these student-athletes to aid in clearance decisions once all symptoms have cleared. Neuropsychological consultation will be obtained for appropriate student-athletes as determined by the physician.

**Multiple Concussions.** Any student-athlete suffering two or more concussions within the same calendar year will not be eligible to return to activity until a more thorough evaluation and clearance is completed by team physicians.