PHYSICAL PERFORMANCE & TEAM SUCCESS IN ICELANDIC SOCCER Arnason A^{1,3}, Sigurdsson SB², Gudmundsson A³, Engebretsen L¹, and Bahr R¹. Oslo Sports Trauma Research Center, Norwegian University of Sport and Physical Education, Oslo, Norway¹, Department of Physiology, University of Iceland, Reykjavik, Iceland², Gaski physical therapy, Reykjavik, Iceland³.

Introduction: Previous studies have examined the relationship between physical performance tests and team success, although usually with a limited number of teams. The aim of the present study was to investigate possible correlation between physical performance and team success in the top two divisions in Iceland.

Methods: Soccer players from 17 of 20 male soccer teams in the Icelandic elite and first divisions participated in the study. Before the start of the 1999 soccer season, the following performance tests were performed: VO_{2 max} test on treadmill, skin fold measurements, flexibility tests for hamstrings, quadriceps, adductors and hip flexors (using a MIE tension meter, a JVC digital camera and KINE view movement-analyze system), jump height (using a contact mat), maximal average power in squats (using MuscleLab equipment). During the 1999 soccer season, injuries were prospectively recorded by each team physical therapist. Team success was determined based on points scored in final division standings.

Results: There were no significant differences in $VO_{2\,max}$, % body fat, body mass index, maximal average power, jump tests or flexibility tests between divisions. The average VO_{2max} were $62.6\,mL\cdot kg^{-1}\cdot min^{-1}$ and $61.1\,mL\cdot kg^{-1}\cdot min^{-1}$ in the elite and first divisions, respectively. A significant relationship was observed between team success and the average counter movement jump (p=0.009) and standing jump (p=0.005) test results. No other significant relationship was observed between team success and measures of physical performance.

Conclusion: Contrary to what has been shown by other studies, our study did not show any difference in strength or endurance tests within or between divisions. However, within divisions there was a significant relationship between jump test results and team success.