The High Performance (HP) group is the highest performing group in RHAC. Its primary purpose is to develop athletes to race and win beyond age group meets. The HP group works towards making Olympic qualifiers, World Championship Qualifiers and Canadian National Champions.

Coaching staff spends additional time to develop athletes technically, mentally, and physically through advanced training methods, services and equipment not offered to any other group.

Athletes in the HP group are expected to perform to the highest standards. They are expected to work towards their short- and long-term goals on a daily basis and be role models for the remainder of the club. HP athletes must have the desire to improve and strive for the highest level of competition. The HP group typically trains with the National group, but may have 1-2 practices per week separate from the National swimmers.