

## RANDOM START ORDER FOR U14, U16

- Whitepaper -

























# Random Start Order – A Pilot Approach to Strengthening The Development of U14/U16 Ski Racing

In the 2023/24 ski season various regions in Canada will be piloting different methods for seeding the start order at U14/U16 races. There is strong evidence that supports the method of random start order as a means to better prepare and develop racers as they move through the developmental system and provide a better experience for athletes and spectators at this level.

The following is an overview of the rationale for piloting this approach

## LONG TERM ATHLETE DEVELOPMENT GUIDING PRINCIPLES

- 1. Keep as many athletes in our sport as possible, reaching their full potential for as long as possible.
- 2. Do not build the system around the outliers.
- 3. Have patience and confidence in our long-term athlete development system.
- 4. Focus culture on long-term development rather than short-term success.
- 5. Utilize smart calendaring for strong athlete development and competition success.
- 6. Create skills first, follow the ACA LTAD 3.0.
- 7. Be resilient and patient.
- 8. Support athletes in the pursuit of their athletic and academic goals.



#### **Fairness:**

Random start order promote fairness in competitions. In traditional races, the top-ranked skiers usually get the most favorable starting positions since they start first on a well-prepared course. A random start ensures that everyone has an equitable opportunity to experience different course conditions, which can even out advantages and disadvantages related to course deterioration or changing weather conditions.

#### **Impact on Athlete Development:**

Providing athletes with the opportunity to race from a variety of start positions demands that they have developed strong fundamental skiing skills and mental preparedness to be successful regardless of course and snow conditions. This attribute is extremely important when the athletes graduate to higher levels (FIS) and field sizes increase as does the calibre of racers. It is not uncommon for first year FIS athletes to be starting with triple digit start numbers. Significant data has been collected in BC (where this start format has been utilized for a number of years) that the race outcomes have been the best athletes still win but learn more from that win.

#### **Psychological Impact:**

Athletes need to adjust their mental preparation when facing a random start. In a traditional race with set start orders, athletes can mentally prepare for their starting position and visualize their race plan with little to no course deterioration. With a random start, they need to inspect really well, be mentally prepared for the uncertainty and be ready to adapt their race strategy. Make a really good plan to try and execute on it. There are coaching testimonials that speak to a heightened focus being shown by athletes on their final training runs in rough conditions, as athletes were trying to figure how to perform in rougher conditions.



#### **Course Variability:**

A random start can lead to athletes experiencing more variable course conditions throughout the race. Skiers starting later might encounter more challenging terrain due to course deterioration, while those starting earlier might face freshly groomed slopes. This variability can add an extra layer of difficulty and excitement to the competition

#### **Tactical Considerations:**

Skiers may adjust their tactical approach based on their starting position. Those starting later might be more cautious if the course conditions have worsened, while those starting early may try to set a fast time to put pressure on the later competitors. Late bibs will have to figure out how to ski fast regardless of the conditions.

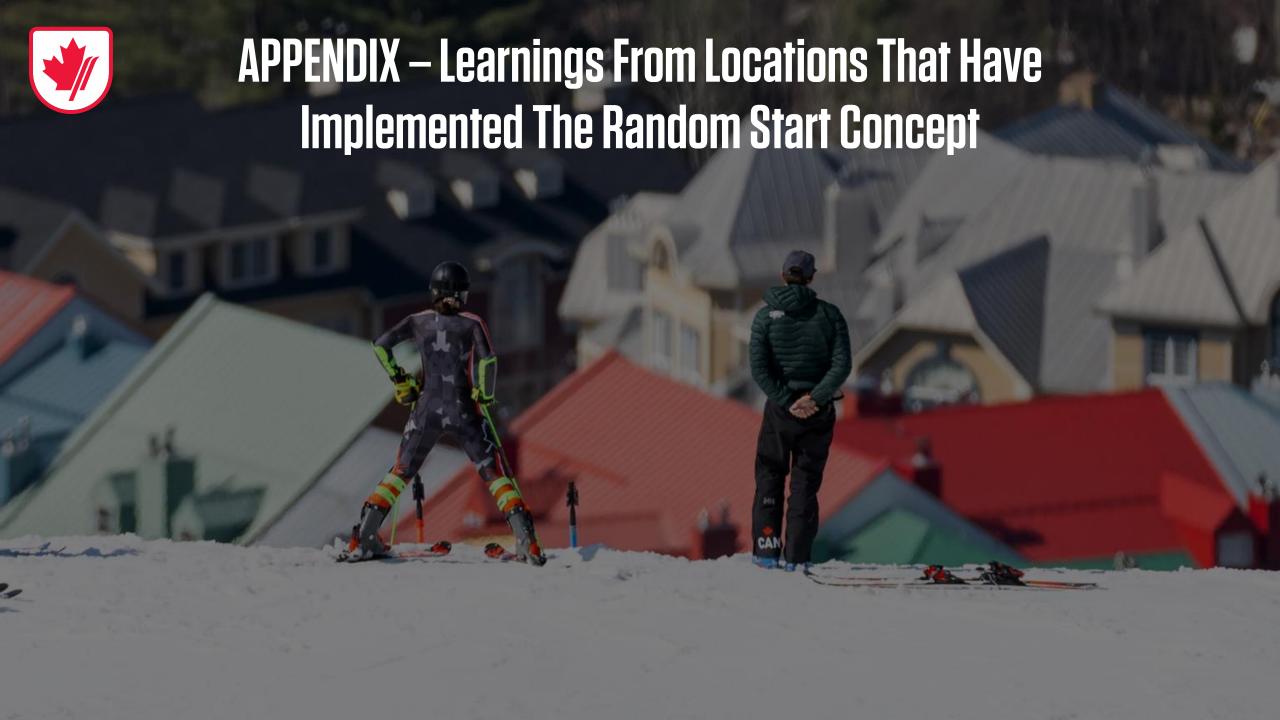
#### **Building Community**

We are attempting to build a strong ski racing community. It is felt that a random start order will contribute to a more cohesive group because of the mix of abilities at the start and finish. Athletes of all abilities have a better chance to create relationships simply because they are experiencing closer proximity to each other. Regions that have already implemented have noted an increase in athletes, parents, and coaches staying to the last racer to cheer on and encourage all racers.



#### **Excitement and Unpredictability:**

Random starts has the potential to make races more thrilling and unpredictable. Since racers start at various positions, it becomes harder to predict the outcome based solely on previous performances or rankings. This format keeps the engagement of coaches, spectators, and course workers until the last racer. Coaches remain focused throughout the race, and don't "tune out" after top seed has finished. Course workers and coaches continue to offer high levels of effort to maintain fair course conditions throughout the race.





### PILOT FINDINGS

#### **Traditional Seeding Method**

 Limited # of athletes starting outside the top 20 finishing inside the top 10

#### **Random Seeding Method**

- Limited # of athletes starting outside the top 20 finishing inside the top 10
- Majority of instances over 50% of the final top 10 came from athletes starting with a bib over 20

Race	# of Racers	Average Bib # in Top 10	Bib Numbers in The Top 10
Race 1	53	9.5	12,14,8,1,5,13,2, <mark>21</mark> ,16,3
Race 2	53	9.8	2,5,7,13,10,4,3,16, <mark>23,</mark> 15
Race 3	53	7.9	10,4,2,16,9,5,17,3,12,1
Race 4	53	15.4	4,15,8,1, <mark>22</mark> , <mark>46</mark> ,12,13, <mark>24</mark> ,9
Race 5	52	11.6	15,4,7,2,18,12,3,19,20,16
Race 6	53	11.3	12,10,8,6,18,4,5,14,20,16
Race 7	53	9.8	15,2,5,11,14,7,4,12,9,19
Race 8	53	10.6	5,8,13,3,14,15,1,6,11, <mark>30</mark>
Race	# of Racers	Average Bib # in Top 10	Bib Numbers in The Top 10
Race 1	# of Racers 84	Average Bib # in Top 10  37	Bib Numbers in The Top 10 46,33,1,72,4,65,12,34,23,84
Race 1	84	37	46,33,1, <mark>72</mark> ,4, <mark>65,</mark> 12, <mark>34,23,84</mark>
Race 1 Race 2	84 86	37 53	46,33,1, <mark>72</mark> ,4,65,12, <mark>34,23,84</mark> 46,33,65,15, <mark>72,35,81,62,69,49</mark>
Race 1 Race 2 Race 3	84 86 85	37 53 23	46,33,1,72,4,65,12,34,23,84 46,33,65,15,72,35,81,62,69,49 16,1,3,50,4,17,75,42,19,2
Race 1 Race 2 Race 3 Race 4	84 86 85 83	37 53 23 45	46,33,1,72,4,65,12,34,23,84 46,33,65,15,72,35,81,62,69,49 16,1,3,50,4,17,75,42,19,2 81,16,70,43,3,50,42,56,17,75
Race 1 Race 2 Race 3 Race 4 Race 5	84 86 85 83 112	37 53 23 45 45	46,33,1,72,4,65,12,34,23,84 46,33,65,15,72,35,81,62,69,49 16,1,3,50,4,17,75,42,19,2 81,16,70,43,3,50,42,56,17,75 4,62,18,44,1,94,56,66,50,53