



Warm-up in Competition

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Objective

Create a state of physiological and psychological readiness for optimal performance.



What's at stake in competition

- Competition Format
- Specificity relative to the race distance
- On-ice vs. off-ice warm-up
- Timing of the warm-up
- Break between events
- What is beyond your control
- Importance of cool-down

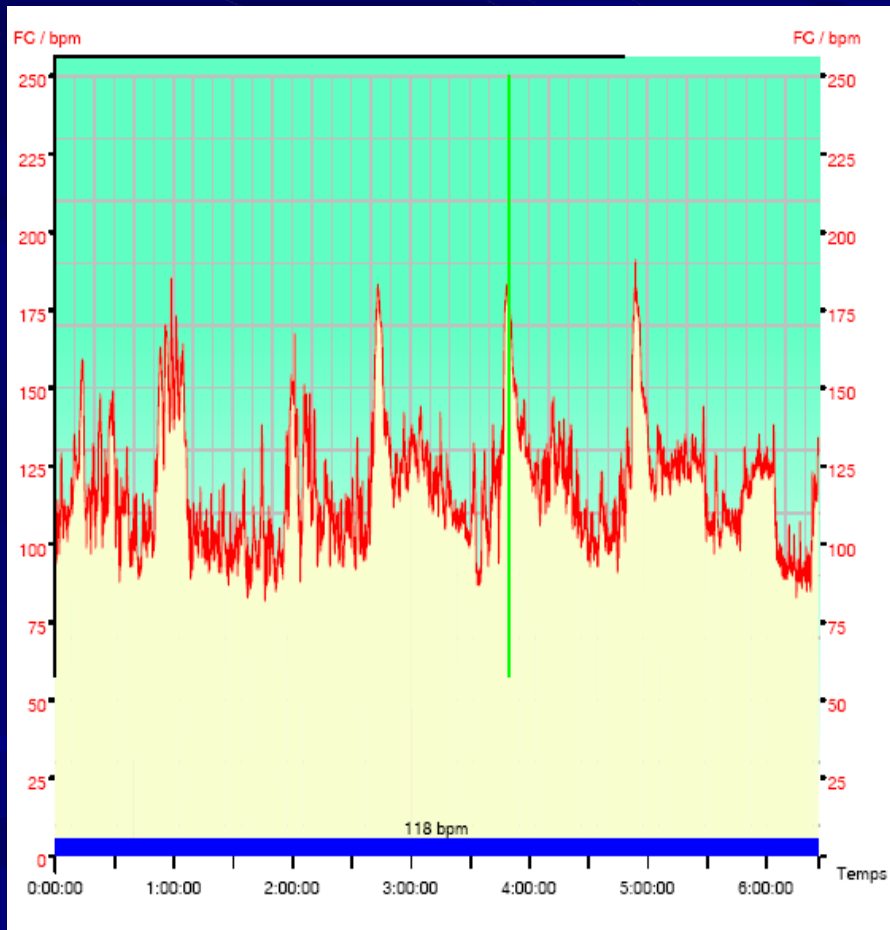
Competition Warm-up Routine

- Specificity based on the race distance
- The athlete must be comfortable with the routine
- Avoid new routines in competition
- Practice the same routine in warm-up
- Minimise the delay between the end of the warm-up and the start of a race
- Modify the duration of the phases based on the time between races

Observations...

- Specificity
 - Too long of a delay
 - The « comfort zone »
 - Fear related to fatigue

Observations



- Monitoring of heart rate during a competition:
 - Avg HR: 120bpm over seven hours
 - No re-activation

Distance Specific

■ 500m

Activation of the nervous system(15')

1. 1 X 10 high intensity jumps progressive (rest 1 min)
2. 1 X Acceleration 20m at 80% of max (rest 1 min)
3. 1 X 5 max jumps (rest 2 min)
4. 1 X Reaction time start (rest 1 min)
5. 1 X Acceleration at 100% of max resistance and reaction time (rest 2 min)
6. 1 X reaction time start

■ 1500m

Activation of the nervous system (1min):

- 1 X 10 progressive high intensity jumps (squat jump, 1 leg jump...)

Aerobic System Activation:

Progressive increase in intensity up to 80% of $\dot{V}O_2$ by increasing the intensity by 10% every minute (3-4 minutes)

Adapting to the competition environment

- Estimate the delay between
 - Warm-up and the first race
 - The races
- Establish a warm-up strategy for every situation
- Adapt to other conditions
- Adapt to other conditions (temperature, available space, equipment...)

On-ice warm-up

- Often too long before the first race (1h+)
- Cannot be considered a warm-up
- Warm-up before warm-up
- How can you take advantage of it

Warming up between races

- Break in excess of 90 minutes
 - Re-do the entire routine
- 60-90 minute break
 - General activation can be short or combined with dynamic stretching
- 30-60 minute break
 - Combine general activation with dynamic stretching (5 minutes)

... Warm-up between races

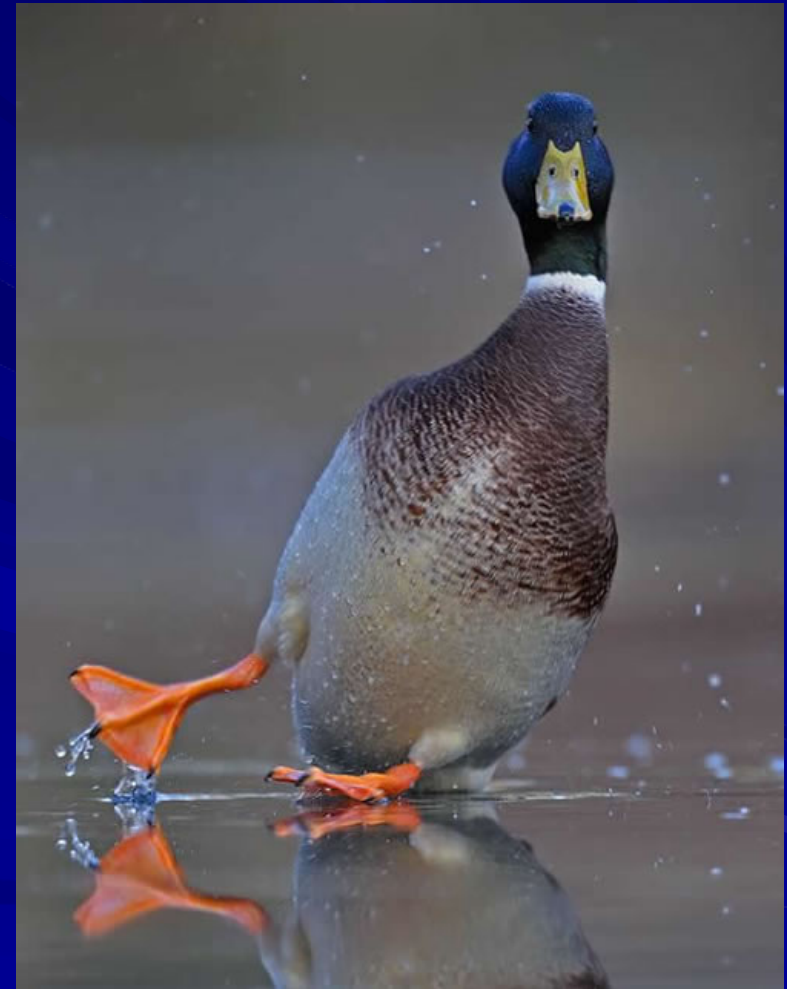
- Less than 30 minutes
 - Re-do only specific warm-up
 - This phase can be adapted based on the race distance

Some examples...

- **500m (first race)**
 1. General warm-up : 10 minutes @ 50-60% VO₂
 2. Joint amplitude (8 min):
 3. Imitations of movements progressively increasing the amplitude of movement.
 1. Lunges front /back / side
 2. Specific technique
 4. Activation of nervous system(15 min):
 1. 1 X 10 jumps progressive (rest 1 min)
 2. 1 X 20m Acceleration at 80% of max (rest 1 min)
 3. 1 X 5 max jumps (rest 2 min)
 4. 1 X reaction time starts (rest 1 min)
 5. 1 X acceleration at 100% of max with resistance and reaction time (rest 2 min)
 6. 1 X reaction time start
- **500m with 45 minute break**
 1. General warm-up : 5 minutes @ 50-60% combined with joint amplitude and movement techniques (5-8 min):
 2. Activation of nervous system(12 min):
 1. 1 X Acceleration 20m at 80% of max (rest 1 min)
 2. 1 X 5 max jumps (rest 2 min)
 3. 1 X reaction time starts (rest 1 min)
 4. 1 X acceleration 100% of max with resistance and reaction time (rest 2 min)
 5. 1 X reaction time start

Unexpected Situations

- Unexpected delay between races
- Modification of race schedule
- Plan measures to be able to anticipate and adapt for these unexpected situations...



Timing

- Determining factor in optimisation
- Minimise the delay in order to optimise the effect
- Never exceed 20 minutes
- Ideally between 5 and 10 minutes
- Seek shorter delays... a challenge!
 - Fear of being late
 - Fear of being tired
- Adapt to the unexpected

Between races

- Nutrition strategy
- Promote a warm-down period of at least 20 minutes
- Avoid being exposed to the cold
- Possibility of including a nap in cases where the break exceeds 3 hours

A process...

- Different capacities to adapt
- Adapt the process based on the needs of your athletes
- One step at a time
- Create simulation opportunities in training

Are You Ready?

