



## **Training Basics for Paralympic Nordic Skiing**

*Nordic skiing/cross-country skiing is a winter endurance sport, but competitive skiers train year-round. Many Paralympic Nordic skiers also compete in summer sports, and this can often provide great balance and beneficial cross-training.*

### General training principals:

- Stressing the body through exercise to increase efficiency and overall fitness
- Recovery- Allowing the body to absorb and improve from training sessions
- Variability in duration, intensity, and activity (day-to-day, week-to-week, month-to-month)

### Cross-country ski training can be broken down into some general categories:

#### **Endurance/Aerobic/Distance Training**

- This training can take many forms in addition to actual ski training on snow. Other aerobic activities include cycling, running, swimming, and mountain boarding/roller skiing.
- Cross training vs. ski specific activities: Much of your aerobic training can be cross-training, but it is also beneficial to incorporate roller skiing or ski erging to train specific movements.
- Approximately 80% of total training volume is low-intensity aerobic training
- Pace: Approximately 70-75% of max heartrate (HR). You should be able to talk easily while doing your aerobic training.

#### **Intensity Training**

- Interval/intensity training is incorporated to improve the body's efficiency when working hard. Quality intensity training will improve your ability to process lactic acid as it accumulates, which in turn enables you to push harder and ski faster!
- Amount and frequency vary depending on the time of year, but generally, intensity increases closer to and throughout the race season.
- HR will vary depending on workout goals. 80% of max HR is a good place to start. Always incorporate a good warm-up and cool-down for intensity workouts.

#### **Strength Training**

- Cross-country skiing demands strength and power in addition to aerobic fitness.
- General strength training should be done year-round to improve power and endurance, achieve better movement, and prevent injury.
- Maximum 3Xweek in the summer and 2Xweek in the fall/winter.
- Make sure to take OFF weeks and plenty of recovery/mobility/prehab

General Rule: Train easy on easy days and hard on hard days. Meaning...use your heartrate monitor to stay in your training levels. Level 1 is EASY. Level 3 is medium-hard, and Level 4 is HARD!

#### **EXAMPLE TRAINING WEEK:**

*This is a sample week that represents a typical weekly training flow. This is just one example; there are many ways to create an effective plan. A simple plan can be modified to fit your schedule, training needs, and interests.*

Monday- Distance workout, 45min-1hr, Level 1

Tuesday- AM Intensity (4X5min Level 3 with 3-4min rest between intervals), PM Strength

Wednesday- AM Distance workout, Level 1, 1:15-1:45hrs,

Thursday- Recovery day- mobility/stretching/yoga/fun activity

Friday-AM Short Intensity/speed work (10X30sec. throughout workout), 1:15-1:30hrs, PM Strength

Saturday- Over-distance, Level 1, 2-2:30

Sunday- Rest/Off Day



## Training Basics for Paralympic Nordic Skiing

Here is a simple chart for training levels. This may vary for different athletes, and your levels will change as you increase training, but this is a good baseline. You can make your heartrate calculations based on your max HR (see below).

Training Level	% of Max Heart Rate	Heart Rate	Pace
Level 1	70-75%		Very easy to talk
Level 2	75-80%		Easy to talk
Level 3	80-85%		Hard to talk
Level 4	85-90%		Very hard to talk
Level 5	90% +		Cannot talk

Athlete's Max Heartrate: \_\_\_\_\_

(To get an approximate max HR, take 220 and subtract your age. Or, you might know about how high you've seen your HR get in a hard effort and can estimate your max.)