

## Coronado Cross Country Information 2023

Hello X/C Runners & Parents:

My name is Mark Tondryk; I am the Head Cross Country Coach for both the boys and girls teams. I am sending out an update on what to expect this year. The CHS program has been very successful. The girls have won the region 11 of the last 16 seasons with a couple of State Championships. The boys have won a few Region Championships and a state runner up. The CHS teams have made it to the State meet for 16 straight years. The boys and girls team are hoping to build on their state performances from last year. We lost a lot of seniors from last season, so we need some kids to step up at State and Region this season. I am also a Nationally Certified Athletic Trainer and have worked with athletes on professional, college, and high school levels. I have a B.S. in exercise physiology and sports medicine. With my background I can hopefully prevent overuse injuries and also help to treat injuries that may occur during the year.

Cross Country intramurals will begin July 10th at 7:00PM @ Paseo Verde Park. It is located near the Valle Verde and Paseo Verde cross section. We will practice Monday thru Thursday each week until practice officially begins on Saturday, August 5th. We may switch some of the practice dates around until the official season starts. Please check the website to stay up to date on Cross Country information:

[http://tondryk.com/tondryk/Cougar\\_Cross\\_Country.html](http://tondryk.com/tondryk/Cougar_Cross_Country.html)

Please make sure you notify me if you need to miss a practice. Parents feel free to join us during the pre-season runs. Times, days, and locations are subject to change due to the heat and any other unforeseen problems. If you will be out of town please contact me in advance. **No one is to run in any road races once the season starts, that is from August 5<sup>th</sup>-November 4<sup>th</sup>.** My phone number and email are:

School           799-6800  
Email            [tondrms@nv.ccsd.net](mailto:tondrms@nv.ccsd.net)

I plan to continue the success of the program and hopefully make it stronger. A lot of our success will depend on your level of commitment to the sport. In order to have a successful season summer running is a **MUST** and it is a good chance for me to view your level of fitness as well as commitment to the team and yourself. It will also give me an opportunity to see who will step up and be the team leaders. As of August 7th all practices and events are mandatory, failure to show will result in disciplinary action. Continued absences will result in removal from the team. **Varsity letters** go out to the top **seven** boys and girls at the end of the season.

What I expect until then is obviously a lot of running. Keep a log of your miles and hand them in to me when we meet on the 10th of July. Now is the time for building your base so you will be prepared to train at a higher level once the season starts. The program

should consist of mainly longer distance runs. You should be working out at a level around 60-80% of your maximum ability. Using the Karvonen formula is a helpful tool. If you have problems with this just call me or email me and I will work you through it. It is as follows:

The **Karvonen formula** uses the heart rate reserve to calculate training zones based on both maximum AND resting heart rate. Here's the actual formula:

#### Calculating Target Heart Rate with the Karvonen Formula

- $220 - \text{age} = \text{maximum heart rate}$
- $\text{Maximum heart rate} - \text{resting heart rate} = \text{heart rate reserve}$
- $(\text{Heart rate reserve} \times \text{training}\%) + \text{resting heart rate}$

Here's an example for a 50year old with a resting heart rate of 65bpm who wants to train at 70% maximum...

$$220 - 50 = 170\text{bpm (maximum heart rate)}$$

$$170 - 65 = 105\text{bpm (heart rate reserve)}$$

$$(105 \times 0.7) + 65 = 139\text{bpm}$$

Using the Karvonen formula this person's target heart rate works out as 139bpm. To create a 'zone' you might want to subtract i.e. 129 to 139bpm

Using the traditional  $220 - \text{age}$  formula this same person would have a target heart rate of 119bpm, which is considerably lower ( $220 - 50 \times 0.7$ ). It's worth noting that the Karvonen formula nearly always calculates a higher target heart rate than  $220 - \text{age}$ .

Here is a rough guide to different heart rate zones and the adaptations they elicit...

#### **Recovery Zone - 60% to 70%**

Active recovery training should fall into this zone (ideally to the lower end). It's also useful for very early pre-season and closed season cross training when the body needs to recover and replenish.

#### **Aerobic Zone - 70% to 80%**

Exercising in this zone will help to develop your aerobic system and in particular your ability to transport and utilize oxygen. Continuous or long, slow distance endurance training should fall under this heart rate zone.

### **Anaerobic Zone – 80% to 90%**

Training in this zone will help to improve your body's ability to deal with lactic acid. It may also help to increase your lactate threshold. The buildup of lactic acid will affect your ability to sustain a high level of performance and muscle contraction.

It is important to remember that the heart rate reserve method of prescribing exercise intensity is by no means flawless. Firstly, estimating a person's maximal heart has been shown to have inaccuracies compared to laboratory testing (2) - where exercise intensity is increased until a plateau in heart rate is found.

Secondly, the heart rate reserve tells us nothing about a person's lactate or anaerobic threshold. By recording heart rate data alongside the point at which lactate threshold is thought to occur, a far more effective training plan can be devised.

### **Stretching**

All good training groups must include flexibility exercises as well. Properly put it should be called extensibility training. A good stretching routine should only be done after the muscle is warmed up. Do not stretch before you run unless you have warmed up with at least 10-15 minutes of aerobic activity. Generally speaking run first and stretch after your workout or run a mile or two and then stretch and then complete your workout. Try to stretch all major muscle groups and hold each stretch for at least 20 seconds to overcome the Golgi tendon reflex. I will explain at practice.

### **Sneakers**

A good training shoe is advised for running. If you have been running for a few years and have no problems, stick with the same shoe. It should be durable with a good arch support as well as a rigid heel counter. Some may need motion control as well. Generally speaking flat feet or pes planus feet need a straight lasted shoe. Those with very high arches or pes cavus need a curve lasted shoe. If you are a new runner and unsure of what to purchase just ask me at practice. Orthotics are also a good supplement to a shoe. It is a custom insert that molds to your foot to keep it in the correct biomechanical position. For those familiar I have a lab in the classroom and can fabricate a pair for those in need.

### **ICE**

For those having general aches and pains, Ice is always a good idea. Ice down the area of soreness for 20 minutes after completion of your workout. For those with chronic trouble, icing before might also help. Some might even need a different program, just see me if having any difficulties.

## Fluid Replacement

In years past many runners were encouraged to stay ahead of their thirst, which meant to drink all the time even when not thirsty. However this is old data and can result in some athletes who were over hydrated leading to hyponatremia, which is a condition of low sodium levels. Now for the most part I would say many athletes here in LV do not get enough water, but how much do we take in? A lot of data says eight 8-ounce glasses a day (64 total); this is merely a guideline and does not account for the food you eat (which has water in it) and the amount of activity you participate in. So try this formula for those who feel they are not getting enough: Males= body weight X .35 & females= body weight X .31.

For example:

Coach T

195 lbs X .35 = 68.25 oz of water per day

135 lb male X .35 = 47 oz

125 lb female X .31= 39 oz

Now this is in addition to my balanced nutritional diet, which I will talk about in a moment. Another method of fluid replacement for just your performance is to take in as much as you lose during your practice or performance. So weigh yourself before and after a workout and take in that much fluid of the weight you lost. This does not account for normal amounts of water you should take in as well during the course of a day. Now for those who do not get enough water dehydration can set in which could lead to heat exhaustion and heat stroke.

Signs and symptoms of Dehydration:

- Mild to excessive thirst
- Fatigue
- Headache
- Dry mouth
- Little or no urination
- Muscle weakness
- Dizziness
- Lightheadedness

## **Nutrition**

Now after teaching 14 years and keeping track of many of your dietary intake in anatomy class, teenagers as a whole have a terrible diet. So parents, you need to remind them or most will not follow along. Most diets follow some format of 50% carb intake, 30 % fat intake, and 20% protein intake. Runners usually increase the carb levels a little more and decrease protein so it is 55% for Carbs, 30 % fat, and 15% protein. Try to eat healthy and follow a diet close to those levels. Your total dietary intake should be based on height, weight, and activity levels. Here are a couple of websites that will give you an idea for total caloric intake based on those variables.

<http://www.marathonguide.com/FitnessCalcs/Caloricneeds.cfm>

<http://www.nutrientfacts.com/DCI.htm>

[http://www.freedieting.com/tools/calorie\\_calculator.htm#](http://www.freedieting.com/tools/calorie_calculator.htm#)

It is a good idea to keep track of your daily nutritional intake if you feel you have a poor diet. Here is a chart you can use to help you keep track. Parents feel free to join in as well. If you do tempt to track your diet make sure you include everything you eat and drink for the day.




**Total Caloric Intake for One-Day**

**Remember Calories per gram:**

**Carbohydrates = 4 cal/g    Fats = 9 cal/gram    Protein = 4 cal/gram**

Example: 1 pop tart

35g of carbs X 4 cal/gram = 140 total calories

5 g of fat X 9 cal/gram = 45 total calories

2 g of protein X 4 cal/gram = 8 total calories

Total calories for 1 pop tart = 193

## **Volunteers**

We will need help at a few of the home meets so I would like to ask in advance for volunteers. It may include activities such as keeping times and places of the runners etc. Also, any parents interested in hosting team building events like team dinners before races please contact me to arrange the details.

## **Fund Raising**

We do not have much of a budget so if any parents have ideas for fundraising please feel free to share them with the team. Invitationals, out of town travel, and miscellaneous expenses such as buses, hotels, and food may need to be covered with monies raised from fundraising. Of course, donations to the program are always accepted.

I am looking forward to meeting and working with you this season.

Sincerely,

Mark Tondryk

Head Boys/Girls Cross Country Coach



