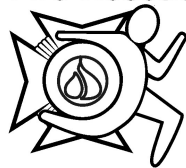


Miami Township

Fire-Rescue



Fitness & Wellness Program

Target Heart Rate Zones

The benefit of working in your Target Heart Rate (THR) is that you can exercise more efficiently. The intensity of training necessary to improve or maintain cardiorespiratory fitness is in the range of 50 to 85 percent of maximal aerobic capacity, or VO_2 Max. This corresponds to a range of 65% to 90% of your maximal heart rate (MHR). Your MHR is the highest rate you achieve in an all out effort to the point of exhaustion. For many people, pushing to this level may not be desirable or safe.

- To calculate your MHR, simply subtract your age from 220.

Your individual health goals will determine at which percentage of this number you should be exercising. Below is a breakdown of 5 Heart Rate Training Zones that have been set for particular goals.

Moderate Activity: 50% - 60% of MHR

Goal: Perfect for beginners, those in extremely poor conditions and those primarily interested in exercising for weight loss because the body burns a higher blend of fat calories than carbohydrate calories for its fuel.

Weight Management: 60% - 70% of MHR

Goal: Weight management and strengthening your heart, giving it the opportunity to work at its optimum level. This is also known as the “aerobic fitness threshold” because from this point on, your body begins to reap the positive effects of aerobic exercise.

Aerobic: 70% - 80% of MHR

Goal: Benefits not only your heart but your respiratory system. Increases your endurance and enhances your aerobic power, which is the ability to transport oxygen to, and carbon dioxide away from the sport-specific muscles. This increases your MET (Metabolic Equivalent) output.

Anaerobic Threshold: 80% - 90% of MHR

Goal: High performance training benefits. Increase your body’s ability to metabolize lactic acid, allowing you to train harder before crossing over into the pain of lactate accumulation and oxygen debt.

Red-Line/Max Effort: 90% - 100% of MHR

Goal: Only extremely fit athletes train in this zone on a limited frequency and duration. Operating in oxygen debt trains metabolic pathways of fast twitch muscles fibers, not endurance pathways or enzymes.

A 44 year old that wants to increase his MET output for his yearly treadmill test would calculate his MHR at 176 beats per minute (220-44). He would then take 70% - 80% (aerobic zone) of 176 to derive 123-140 beats per minute. Heart rates during training within this zone are optimal and beneficial for this person’s particular goals.

Information adapted from the Phoenix Fire Department’s “Target Heart Rate Zones”.