



UKDMC Asthma & Diving Exercise test

- **Exercise Induced Asthma (EIA) depends on:**
 - Type of exercise - Running better than an exercise bike
 - Duration - Needs to be at least five minutes, preferably more
 - Intensity of exercise - Needs a high ventilation rate & heart rate >80% of maximum achieved rapidly from onset of exercise
 - Inspired air temperature - cold air better
 - Water content - Dry air = cold air
 - Time since last exercise (refractory period)
- **American Thoracic Society Consensus**
 - Ventilation required 17.5 to 21 x FEV1
 - Unfortunately absolute direct relationship between HR & ventilation
 - Need rapid increase in ventilation over 2-4 minutes to achieve high level of ventilation
 - Need to achieve HR of 80-90% of max & maintain for 4-6 minutes
 - Breathe dry air
- **Suggested Exercise test**
 - Step test
 - Start on Chester level 4 then level 5 for 5 minutes
 - HR monitoring
 - Ideally breathing from a scuba tank (dry air)
 - Then spirometry at 5, 10, 15 & 30 minutes