

## **FEI Warm Up Durations - 2016**

Author(s): Tim Worden, PhD

Original publication date: 2016

First appearing in: Horse Network <https://horsenetwork.com/2016/10/whats-right-amount-time-warm-jumping-competition/>

*In this article, I provide some data I collected from the Wellington Equestrian Festival this past winter. The data provides general information about the duration of warm-ups used by 54 horse-rider combinations competing in the 1.50-meter FEI Table A class on January 31st, 2016. The competition featured top riders such as McLain Ward, Meredith Michaels-Beerbaum, Eric Lamaze and Laura Kraut. McLain Ward and HH Carlos Z won the class, with 13 riders going clear in the first round.*

Whenever I am at a competition, I spend more time watching the warm-up ring than the competition ring, itself. Much can be learned by watching the horses warm-up and hearing the discussions that go on between riders, trainers, and support staff before entering the ring.

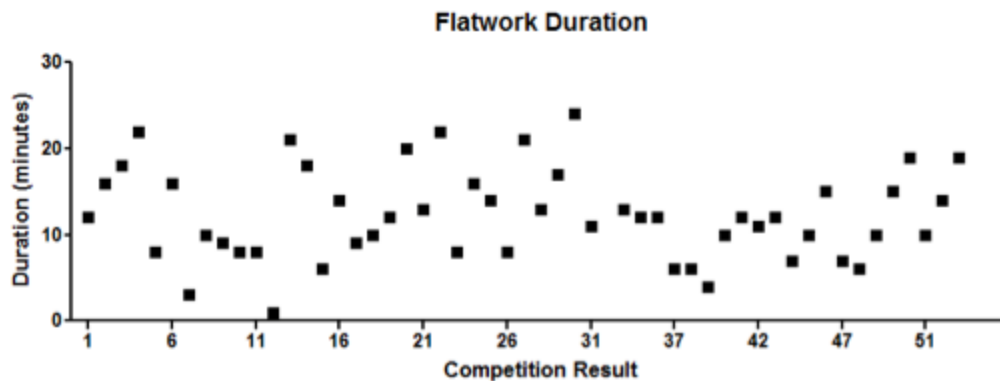
Without a proper warm-up that prepares the horse and rider for competition, it is highly unlikely that a good competition result will be achieved. Some goals of the warm-up are: improved elasticity and contractility of muscles, greater efficiency of cardiovascular and respiratory systems, better concentration and improved movement coordination.

Generally, the warm-up for show jumping horses can be broken down into two phases, which will be the focus of this analysis.

### **Phase 1: Flatwork**

The purpose of this phase of the warm-up is to have the horse complete general movements that ensure he or she is at an optimal physiological state before jumping commences. The general progression once the rider mounts the horse is a gradual increase in the intensity of exercise (e.g. a few minutes of walking, followed by trotting, and then cantering). Of course, during this time there is variety in the types of flatwork performed during each gait, but I will not go into detail on that in this article.

Below, the amount of time each rider flatbed their horse against their final competition result is displayed. Each data point represents one rider's flatwork duration. As you can see, there were a wide range of flatting durations employed by riders in warming up for this competition.

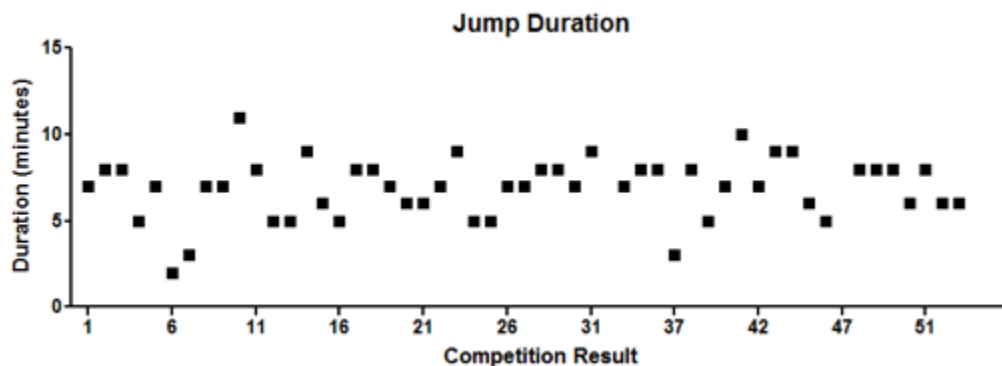


The average flat time was 11.7 minutes, while the maximum time spent flatting a horse was 24 minutes by one rider. Interestingly, the minimum flat time was 1 minute; this was a result of the horse arriving late to the warm-up ring.

**Phase 2: Jumping**

The purpose of the jumping phase of the warm-up is to prepare the horse’s central nervous system for the demands of the actual competition. After the gradual increase in intensity during the flatwork phase of the warm-up, the jumping phase now begins to closely match the intensity of work needed in the competition ring, setting the proper rhythm and coordination of movements.

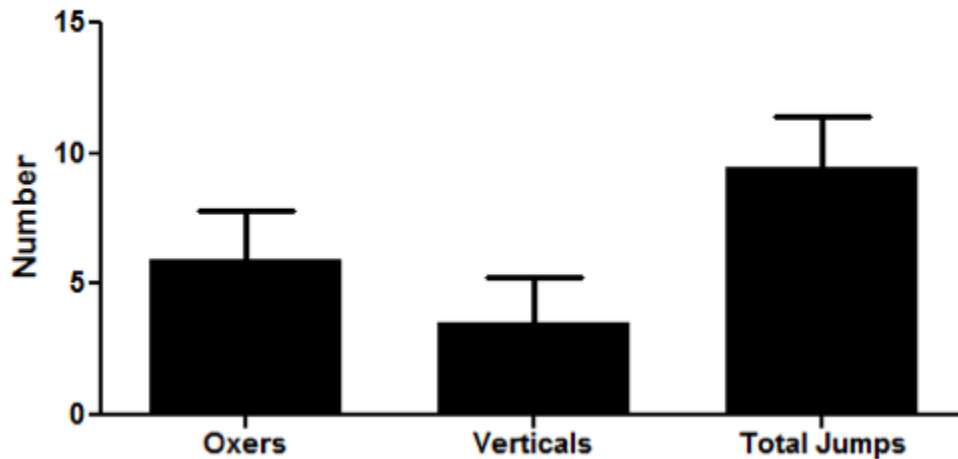
Below, the duration each rider jumped their horse and their final competition result is depicted. Before looking at the data, it is important to note that riders are largely constrained in the duration of the jumping portion of the warm-up by the number of jumps available in the warm-up ring (4 in Wellington). It is possible that some riders may want to jump their horses for a longer period but are unable to do so due to the limited availability of jumps. The average jumping duration was 7 minutes. The longest jumping phase of any rider was 11 minutes, while three riders only took a few jumps over three minutes.



The next aspect to address is how many jumps were taken in warm-up. The average number of oxers, verticals and total jumps is shown in the graph below. Perhaps more important than the actual

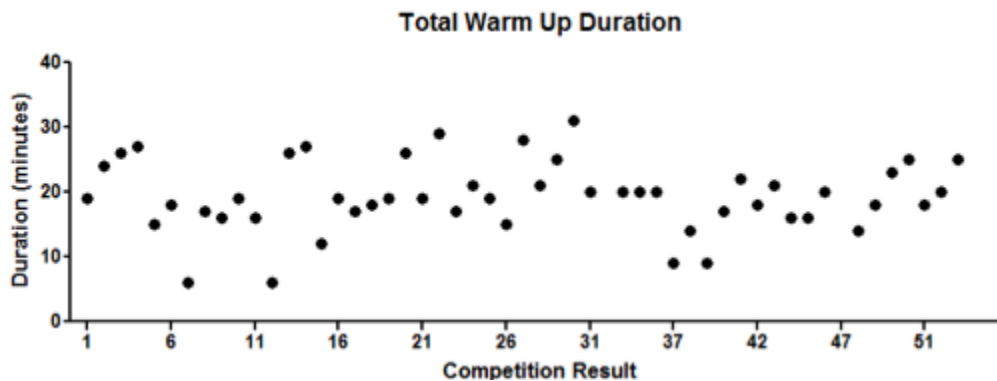
number of jumps is the way different jumps are used. Each rider has a slightly different progression they use during the warm-up. For example, some riders will consistently start with oxers, and finish with 2 or 3 verticals. Others may use a Liverpool, a landing rail, and so on at some point in their warm-up.

### Number of Jumps Taken during Warm Up



### Total Warm-Up Duration

Below, the total warm-up duration has been graphed for each rider. The average warm-up length for an FEI horse at this competition was 18.9 minutes. The longest duration was 31 minutes, and the shortest was 6 minutes. These durations should help guide warm-ups of anyone competing in show jumping. If your warm-up is significantly longer or shorter than these average values, there should be some justification for why you have chosen this.



As a concluding thought, remember the horse that showed up late to the ring that I mentioned earlier? In spite of only flatting the horse for one minute, and jumping for 5 minutes, this horse still made the jump-off. This reinforces the concept that there is likely not one optimal duration for a warm-up. It is highly likely that there are many different warm-up types that can produce top results, based on the horse you are riding and the constraints of the environment around you.