

DOWN SYNDROME LETTER

Dear Parents:

There is a condition known as Atlanto-Axial dislocation or subluxation in individuals with Down Syndrome.

Parents or guardians of children with Down Syndrome who seek to participate in horseback riding with Jacobs' Ladder Therapeutic Riding Center, Inc., must be made aware of this condition known as Atlanto-Axial dislocation or subluxation which can occur in 10-20 percent of individuals with Down Syndrome. The two vertebrae at the top of the spinal column are named the atlas and axis respectively. In some persons with Down Syndrome, the ligaments and bone structures that normally maintain the proper position of these two vertebrae with respect to each other and the skull are abnormal. The abnormality permits under certain conditions of physical stress the spinal column to shift which pinches the nerves issuing from the base of the brain, leading to severe consequences. Because of this possibility, the management at Jacobs' Ladder wishes to protect persons with Down Syndrome from activities such as horseback riding which could aggravate this condition until they have been examined by their doctor. The doctor will determine if the condition is present by an examination that requires a neurologic exam, which may also include an x-ray view of the neck when it is both flexed and extended. If the x-rays demonstrate that the Atlanto-Axial dislocation or subluxation is present, then the person with Down Syndrome may not participate in horseback riding. Neurologic signs always supersede radiographs and the presence of a neurologic disorder must be evaluated by a physician and is a contraindication for mounted equine activities.

The Professional Association of Therapeutic Horsemanship International requires that all participants with Down Syndrome have, prior to starting mounted activities:

- A. A yearly medical examination including a complete neurologic exam that shows no evidence of AAI.**
- B. Written certification by a physician that an examination did not reveal atlantoaxial instability or focal neurologic disorder.**

Please note that it is not just a fall that is a potential for injury. For a participant with low muscle tone and laxity in the joints of the neck, the repeated movement of the equine or a sudden quick movement of the equine as with a spook or a misstep could be enough to cause problems.

If Atlanto-Axial dislocation or subluxation is not present in an individual with Down Syndrome, the individual may participate without restrictions in the riding program at Jacobs' Ladder Therapeutic Riding Center, Inc.

Sincerely,

Leslie Jacobs

Leslie Jacobs,
Director