

# Down Syndrome Indiana™



## Atlantoaxial Instability

### *Ask the Expert...*

**Q. My daughter (with Down syndrome) signed up for Special Olympics and we were told she need an x-ray of her neck. Why does she need this?**

**A.** As you may be aware, children with Down syndrome have problems with ligament laxity (looseness) and this can occur in the cervical spine (neck), especially at the occiput (back of the head) – C1 vertebra (occipital-atlanto) and C1-C2 vertebrae (atlantoaxial) levels. Cervical spine x-rays can help determine whether there is ligament laxity and/or instability at these levels of the neck. If there is evidence of instability of the cervical vertebrae, the child may be at risk for catastrophic neurologic damage with even mild cervical spine injury. Consequently, they should not participate (and will not be allowed to participate) in Special Olympics. In addition, they may require surgical treatment of their instability (i.e. cervical spine instrumentation and fusion), which we do here at Riley.

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For More information, please contact Down Syndrome Indiana at [www.dsindiana.org](http://www.dsindiana.org)  
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