
STANDING AS PART OF 24-HOUR POSITIONING AT HOME AND AT SCHOOL
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CLINICAL WORKSHOP

This course will highlight common secondary diagnoses that can occur with children with neurological disorders such as cerebral palsy, spina bifida, and muscular dystrophy. A thorough review of relevant evidence for 24-hour positioning interventions will be included. Practice parameters for positioning in different devices, including standing parameters, with supporting research, will be discussed. Case examples will be included.

Learning Objective 1: The participant will be able to identify three physiological side effects of immobility common in children with disabilities.

Learning Objective 2: The participant will list three benefits of 24-hour positioning programs for children throughout their childhood supported by evidence.

Learning Objective 3: The participant will list three benefits of standing in mitigating the impacts of immobility supported by evidence from the literature.

The benefits of standing are well established. For many families, standing at home in a stander is difficult because children arrive home late and there are not enough hours in the day to get the recommended amount of standing daily. The use of standers in the school in addition to the home can help to assure that children can get the maximum benefits from standing.

Proper positioning throughout the day and night for children with disabilities is important to development. The use of standers in addition to wheelchairs and other positioning equipment may help to reduce some of the physiologic side effects to immobility that are common in children with cerebral palsy who are GMFCS Level III-V(1-13).

Children without disabilities stand between 8-10 months of age. This standing helps with the forming of the acetabulum. It is very important for children with disabilities to stand regularly. When children have spasticity they are also at increased risk of developing hip subluxation as they grow. Standing will increase the depth of the acetabulum and decrease the risk of subluxation. Additionally, there is research showing that standing in abduction may assist in preventing hips from subluxing (1-6).

Children who cannot stand are at high risk of developing contractures in their hips, knees, and ankles. Standing has been shown to delay and decrease contractures (5,7). Additionally, standing has been shown to decrease spasticity in children with cerebral palsy (5,8). Decreasing spasticity will assist in maintaining and improving range of motion and improving overall level of function and making care easier for the child's family. Standing also facilitates better emptying of the bladder, which can decrease the risk of developing urinary tract infections (9).

Children who do not independently stand are at increased risk of developing osteoporosis due to their inability to stand independently (5, 10-11). A standing frame allows children to bear weight through their lower extremities to help to maintain bone density. Standing has been shown to improve circulatory, gastrointestinal, bowel and bladder, and respiratory functions (10,11).

Children who sit throughout the day are constantly bearing weight on their buttocks. This puts them at an increased risk of developing pressure injuries (11). People who stand for at least 30 minutes a day have less pressure injuries than those who do not stand (12).

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Speaker Bio

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