<table>
<thead>
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<th>Most Common Conditions</th>
<th>Description, Epidemiology, and Risk Factors</th>
<th>Pathophysiology</th>
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| Cerebral Palsy | Most common physical disability in childhood worldwide: 2/1000 live births  
Complicated birth, genetic, multiple birth pregnancy, in vitro fertilization, hypoxic brain injury, viral infection | Different types of cerebral palsy associated with different areas of injury  
Spasticity: most common symptom  
Abnormal muscle architecture |
| Spina Bifida | Folate deficiency, lack of prenatal care | Neural Tube Defect  
Myelomeningocele: most common type |
| Traumatic Brain Injury | Bimodal Distribution: 0-2 years and 15-18 years  
Abuse, accidents, risky behavior, falls, hyperactivity, electrolyte abnormalities, seizures | Primary Injury: direct damage, axonal injury  
Secondary Injury: Seizures, cerebral edema, hypoxia |
| Spinal Cord Injury | Abuse, accidents, risky behavior, falls, hyperactivity, sports injuries, infections, cancer | More likely to have complete injury  
Complete: extensive hemorrhage, cord disruption  
Incomplete: contusion, partial cord disruption |
| Down Syndrome | Most common inherited genetic syndrome  
Trisomy 21  
1 in 691 births | Complete trisomy of chromosome 21 due to nondisjunction during meiosis |
| Spinal Muscular Atrophy | Autosomal Recessive  
SMA-1: most common (60-70%) | Lack a working SMN1 gene--affects motor neuron function |
| Duchenne and Becker Muscular Dystrophy | X-linked recessive  
Risk factor: born to female carrier | Abnormal dystrophin gene: connection between the skeletal muscle membrane’s dystrophin-associated complex and the actin filaments |
| Ehlers-Danlos Syndrome | 1 in 5,000 births | Genetic defects affecting collagen type I, III, IV  
Classic, hypermobility, and vascular subtype most common |
| Juvenile Idiopathic Arthritis | Genetic and environmental factors  
HLA-A2 and HLA-B27 implicated in some cases  
Most common chronic rheumatic disease in children  
Distinctions in geography and ethnic groups  
Younger age onset in Western Europe  
Africa and Eastern Europe: higher rates | Inflammatory Syndrome characterized by chronic synovial inflammation with B-Lymphocytes |