



Physical Development & Tractors

Physical Development in Children

- Children and adolescents are physically different from adults.
- Youth usually have shorter arms and legs, meaning their reach is less.
- Youth usually have less strength than adults.
- Because of their size, youth may have different visual angles and perspectives than adults.
- Youth may have less coordination and poorer balance than adults.



Differences in Physical Characteristics between Children and Adults

Reach

- Children have shorter arms and legs than adults.
- Children have shorter torsos than adults.
- Because of their size, children may not comfortably, quickly, or easily reach foot pedals, hand levers, or steering wheels while operating a tractor. This can impact safety.
- Because of their size, children may not wear seat belts in tractors, reducing their safety.

Balance and Coordination

- Children are often not as coordinated as adults.
- Children have less ability to balance compared to adults.

Strength

- Children are generally weaker than adults.
- Children may tire easily, having less endurance than adults.
- Less strength and less endurance can impact safety because youth may not be able to use strength to push pedals or levers. This is especially risky in emergency situations.

Vision

- When sitting in a tractor, children may have different visual angles because they are shorter.
- A limited field of view while operating a tractor can impact safety significantly.

See [Operating a Tractor](#) to determine if a youth is capable of safely operating a tractor.

