Cognitive Development & Tractors

Cognitive Development in Children

- Children's cognitive thinking skills are not as developed as adults.
- The ability to process information the way an adult does involves both maturation and learning. It usually develops slowly over time.
- Maturation in thinking skills does not depend entirely on chronological age, nor is it entirely a function of intelligence.
- The ability to process information and make decisions quickly and precisely is essential to the safe operation of a tractor.



Differences in Cognitive Ability between Children and Adults

Speed of Processing

- Children absorb and process information more slowly than adults.
- Children cannot make decisions as fast or efficiently as adults.
- Tractor operation requires rapid and precise processing of information to remain safe. Any delays – even split seconds – can jeopardize safety.

Decision-Making

- Children are still developing the advanced skills needed to think about information logically and reach decisions.
- Children are less able to understand the consequences of their actions.
- Children are not as good at considering alternative options to a dilemma or decision.

Impulse Control

- Compared to adults, children have inferior ability to restrain themselves when they want something.
- Poor impulse control increases risk when operating tractors.

Generalization Skills

- Children are less able to translate a message learned in one scenario to a similar situation.
- As a result, youth may make dangerous mistakes when operating tractors.

Attention Span

- Children are unable to concentrate on a single task for as long as most adults.
- Operating a tractor can require focused attention for long periods of time to maintain safety.

See Operating a Tractor to determine if a youth is capable of safely operating a tractor.

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