

# How **QUICK** Are You?

**This simple test shows you can't react fast enough to prevent injury and possible death—from fast-moving farm equipment.**

**W**ith agricultural machinery entangling at speeds of 7 to 66 feet per second, it's impossible to pull free once hair, clothing or a limb becomes caught. This quick test proves that your equipment is quicker than you:

**1** Hold the Reaction Stick perpendicular to the floor, with the "START" end down.

**2** Ask a friend or family member to extend their hand with their thumb and forefinger parallel to the floor, approximately 1½ inches apart. Position the Reaction Stick above your friend's

hand, with the word "START" lined up just above their thumb and forefinger.

**3** Tell them to be ready to catch the Reaction Stick when you drop it, but then distract them. Try carrying on a conversation with them—ask them a question, ask them to widen their fingers slightly.

**4** Release the Reaction Stick. When they catch it, note the scale number that is just above their thumb. This is the number of seconds it took them to react.

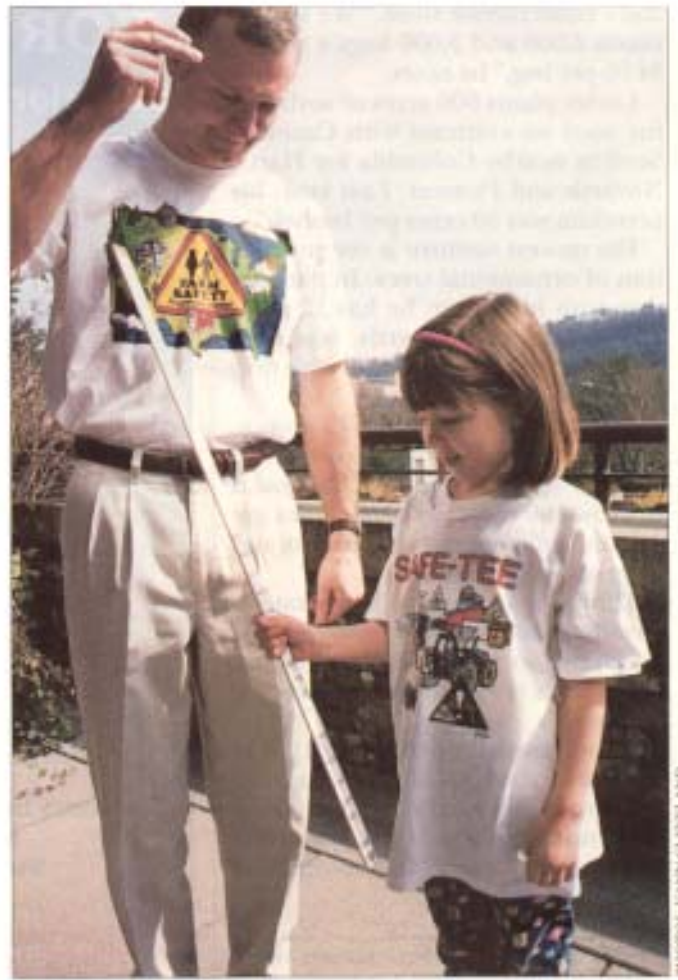
**5** Compare their reaction time to our chart to see if it is quick enough to

save them from injury and possibly death.

**6** Remind them that if they want to stay alive and keep their limbs and hair, they should always follow the safety guidelines given for each piece of equipment.

By **CHARLES V. SCHWAB**

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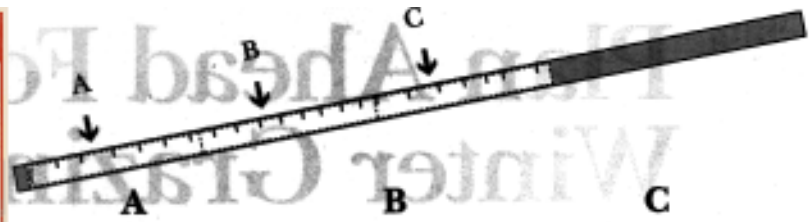


*Des Keller of the Progressive Farmer staff drops a Reaction Stick to test 6-year-old Marie Eddins' reaction time.*

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## How Fast Are You?

**MAKE A REACTION STICK.** You will need one yardstick, the time scale on this page, scissors and tape. Cut out each segment (at right) along dotted lines. Tape segment A  $\frac{1}{2}$  inch from the bottom of the yardstick. Tape segment B on top of segment A. Then tape segment C on top of segment B (see illustration).



## How Fast Is Your Equipment?

**ROTARY LAWN MOWER:** 52 cuts per second.

- 5 cuts in 0.1 second
- 10 cuts in 0.2 second
- 15 cuts in 0.3 second
- 20 cuts in 0.4 second
- 26 cuts in 0.5 second

**STALK ROLLS ON CORN HEAD:** Pulls cornstalks in at 12 feet per second.

- 1.2 feet in 0.1 second
- 2.4 feet in 0.2 second
- 3.6 feet in 0.3 second
- 4.8 feet in 0.4 second
- 6 feet in 0.5 second

**BELT AND PULLEY:** Travels at 66 feet per second.

- 7 feet in 0.1 second
- 13 feet in 0.2 second
- 19 feet in 0.3 second
- 26 feet in 0.4 second
- 33 feet in 0.5 second

**PTO SHAFT:**

At 540 rpm, pulls in 7 feet per second.

- 0.7 foot in 0.1 second
- 1.4 feet in 0.2 second
- 2.1 feet in 0.3 second
- 2.8 feet in 0.4 second
- 3.5 feet in 0.5 second

At 1,000 rpm, pulls in 13 feet per second.

- 1.3 feet in 0.1 second
- 2.6 feet in 0.2 second
- 3.9 feet in 0.3 second
- 5.2 feet in 0.4 second
- 6.5 feet in 0.5 second

**AUGER ENTANGLEMENT:** A 6-inch auger at 400 rpm entangles at 10 feet per second.

- 1 foot in 0.1 second
- 2 feet in 0.2 second
- 3 feet in 0.3 second
- 4 feet in 0.4 second
- 5 feet in 0.5 second

**DISTANCE EQUIPMENT FALLS DURING REACTION TIME:** An object falls at a rate of 32 feet per second.

- 0.2 foot in 0.1 second
- 0.6 foot in 0.2 second
- 1.4 feet in 0.3 second
- 2.5 feet in 0.4 second
- 4.0 feet in 0.5 second

