



# Be tractor **safe**

**Tractor accidents are the major cause of farm work related deaths and injuries in the country. Last year, the 15-times winner of the Duzi canoe marathon, Graeme Pope-Ellis, was killed in a tractor accident on his Pietermaritzburg farm while ploughing his fields.**

Tractor upsets or overturns account for more than half of all tractor-related deaths and injuries. Falls are also a major cause of tractor accidents. Falls involve both tractor operators and extra riders, who are often children.

Another source of tractor-related injuries and death is entanglement in rotating power-takeoff components.

## **Know how to operate the tractor safely**

Few tractor operators have had intensive training on tractor operation. A vitally important tractor safety rule is to be sure that each person who operates a tractor is trained, physically fit and qualified to do the job.

The new tractor operator should first practice, without equipment attached, in a level field or a large, level yard. A skilled operator should be the trainer. The trainer should start the tractor, demonstrating the procedure to the new operator. The trainer should drive the tractor around the yard, showing the student how each of the controls operate. The new operator can then take the seat and operate the tractor, while the trainer stands on the drawbar to give assistance if needed.

If your tractor is equipped with a cab, the trainer will need to ride in the cab to give the necessary instruction. Normally, extra riders should not be allowed anywhere on the tractor, but when a new tractor driver is being trained, an exception must be made. The hazard is also not so great during the training, since the tractor is operating on level ground at slow speed without attached equipment.

After the new operator has learned to operate the tractor alone in a level area, the next step is to attach and operate equipment. The trainer should now stay off the tractor. The new operator should gradually work into the more complex jobs of tractor operation.

### **Preventive maintenance**

Many factors affect the reliability and safety of your tractor. Safe operation begins with making a pre-operational check before each tractor use. Keeping the tractor in good repair is an important part of safety.

#### **Before starting the tractor, check:**

- Tire condition and inflation level
- Fuel, oil and hydraulic fluid levels
- Condition of fuel and hydraulic lines - no leaks
- Shields in place
- Platform and steps clean, free of debris, chains and tools
- Be familiar with your terrain and work area – walk the area first to be sure
- Brakes operational
- Steering operating correctly
- Air cleaner and coolant have been applied
- All lights working
- The reflector strip is in place and is clean
- Neutral-start safety switches operating correctly.

Your tractor operator's manual is an important safety manual. Read it, know and understand the information in it. Follow all operating precautions and the recommendations outlined in the manual.

Before starting the tractor, check your clothing. Loose, torn, or bulky clothing can catch on moving parts, pedals, or levers. Clothing should fit well and be in good repair. Your shoes or boots should be in good condition and have slip-resistant soles. Laces should be tightly tied and not extend out beyond the shoe. Long hair should be tied back or kept under a hat.

## Safe refuelling

Prevent fires and explosions when refuelling. The greatest danger occurs when handling gasoline, gasohol or LP-gas, because these fuels vaporise easily to form explosive mixtures.

Never refuel your tractor while the engine is running or is hot. Static electricity, a spark from the ignition system or a hot exhaust could cause the fuel to ignite. Grounding out the tractor by use of a ground wire or by dropping mounted equipment so it touches the ground can reduce static electricity.

Label your fuel containers so that they can be identified quickly and accurately. Carry gasoline and diesel fuel in approved safety cans.

Carry a first aid kit and an approved ABC-type dry chemical fire extinguisher. Every tractor should have at least one extinguisher.



Always refuel your tractor outside. Locate large storage tanks at least 12 metres from any building. Keep the storage area free from weeds and other easily ignited materials.

## Safety on public roads

Use all required and available safety devices and driving skills when operating tractors on public roads. Make sure that your signal lights are working.

Roll-over protection, a safety hitch, reflector strip, rear-view mirrors, signal lights, hand signals, clearance lights and/or reflectors are all aids to safety on the highway.

Make sure all loads are properly secured.

Avoid excessive speed and drive defensively. Be considerate of others and pull over to the shoulder when necessary. Allow traffic to pass.

Keep your tractor and implements in your lane. If your equipment is wider than the traffic lane, keep it over on the shoulder.

Consult Arrive Alive, the AA, local police or traffic department for regulations on moving extra wide equipment on public roads.

For more information, log on to Kubota South Africa at [www.kubotasa.co.za](http://www.kubotasa.co.za). Additional information from Purdue University Cooperative Extension Service

## Some basic safety practices

### No extra riders

Don't allow extra riders and don't ask to be an extra rider. Make this a firm rule, and avoid a major cause of tractor accidents. Tractors are designed only for the drivers.

### Get on and off safely

Don't mount or dismount when the tractor is moving. Keep the mounting steps, handholds and operator platform clean and dry. Do not jump from the tractor. Set the brakes if there is the slightest chance of rolling.

### When stuck in a hole

When stuck in a hole or soft spot, a tractor can easily upset backwards when the clutch is engaged. If power is applied and the wheels stick, the chassis may revolve around the axle. When you can't back out, get help.

### Hitch to the drawbar only

Never hitch to the axle or seat bracket – if you do, you are inviting a backward upset. Engage the clutch smoothly and avoid sudden acceleration.

### Use tractors only for the jobs intended

Tractors are meant to be implement carriers, transport units and remote power sources. Tractors are not designed for recreation nor for use as a tow truck or to run errands, herd cattle, and more.

### Stay clear of ditches and embankments

Keep tractors and implements away from ditch and embankment edges. Implements that slip over the edge will tend to pull the tractor with them.

### Loader accidents are common

Move and turn the tractor at low speeds. Keep the load low while moving. Add rear weight and keep wheels wide. Lower the loader to the ground when parking or servicing.

### Drive at a safe speed

When speed is doubled, the chance of a side upset is four times as great. Adjust your speed to conditions.

### Operating on slopes and hillsides

A tractor will overturn sideways much more easily because the wheels are close together. Watch for rocks, humps or holes, which may cause the tractor to tip. Make uphill turns with caution, particularly with tricycle-type tractors. Turn downhill if stability becomes uncertain. Backward upsets are apt to happen when climbing hills, going forward out of a ditch or overloading the drawbar. If you have to go up a steep slope, back the tractor up the slope. Use a lower gear when going downhill. 