

Taking a deep breath for driver safety

Written by Mariska Morris

Thursday, 23 November 2017 13:00



Most accidents occur as a result of human error. Companies can train their drivers, but they have very little control over drivers' behaviour once they leave the depot. MARISKA MORRIS investigates

The World Health Organisation (WHO) estimates that globally around 1,2 million people die on the roads annually, with many more sustaining serious injuries. Most accidents are caused by human error such as speeding and driving while under the influence of alcohol.

The WHO notes that 58 percent of road traffic accidents in South Africa result from drunk driving, despite South Africa being one of only 34 countries with national laws on drunk driving.

The Road Traffic Management Corporation (RTMC) notes in its Traffic Offence Survey of December 2016, that a total of 211 432 drivers were tested for alcohol levels and 27 143 arrests were made for drunk driving in 2016.

South Africa has very strict legal alcohol levels for drivers. The legal limit for a breathalyser test is 0,24 mg per 1 000 ml for drivers of private vehicles, and 0,1 mg per 1 000 ml for professional drivers with a Professional Driving Permit (PDP), including taxi, bus or truck drivers.

“This is significantly lower than many countries, such as the United Kingdom (UK), yet we are still seeing higher rates of drunk-driving incidents and accidents than those countries,” says Rhys Evans, director of Alco-Safe, a supplier of drug and alcohol testing equipment.

Accidents involving large vehicles, such as trucks or busses, are often very serious. The RTMC investigated 36 major accidents involving 49 trucks in 2016, which led to a total of 143 fatalities and 136 injuries.

Taking a deep breath for driver safety

Written by Mariska Morris

Thursday, 23 November 2017 13:00

Evans also points out that alcohol is often a cause of workplace accidents. He comments: “Around 20 to 25 percent of injuries in the workplace involve employees under the influence of alcohol. Drugs and alcohol supplied at work amounts to 15 to 30 percent of all accidents at work.”

Many companies, especially in the transport industry, are very strict with their policies. Evans points out: “If a truck or bus driver under the influence is involved in an accident, the company needs to prove that it took reasonable steps to ensure the driver was fit for duty.”



“For our construction clients and those in the transportation industry, a breathalyser test on entry to the site and at the end of the day will ensure workers arrive sober and stay that way throughout the day,” he adds.

Robert Soares, director of Trailer Sol – which offers the Patrol DX breathalyser – notes that many of his clients request a limit even lower than the required limit for PDP drivers. He says: “Clients are requesting a limit 0,01 mg per 1 000 ml.”

There are various systems available to ensure that drivers comply with a company’s policy on alcohol, such as dashboard cameras, alert signals and even breathalyser test kits.

“Even though many companies undertake a breathalyser test at the depot, they have no control of drivers or operators while they are outside the depot,” Soares states.

The Patrol DX is a tethered alcohol breathalyser technology that prevents the driver of a heavy commercial vehicle from starting the truck while under the influence.

Taking a deep breath for driver safety

Written by Mariska Morris

Thursday, 23 November 2017 13:00

“The unit is connected to the vehicle’s electrical system to disable the starter motor until the driver has taken a breathalyser test. Once the driver has given the sample and passed, the unit will engage the starter motor relay and the driver can start the vehicle,” Soares explains.

The driver is able to see the results of the breathalyser test (whether the test was passed or failed and the alcohol content). The device can also request repeat samples while the truck is in motion. If the driver fails the test, the vehicle will be immobilised as soon as the ignition is turned off.

“The unit will ask for a random sample. This is determined by the client and programmed into the unit. It will prevent the driver or operator from consuming alcohol while using the vehicle. If you have two drivers in the vehicle, the driver change function is there to ensure that the driver operating the vehicle has given a sample,” Soares points out.

Drivers are able to reactivate the vehicle in emergency situations with two override functions. A once-off override function keeps the vehicle mobile, while an emergency override pin code can be issued by the control centre in the case of a technical failure.

“The override function is on a one-time pin system that is randomly generated by the control room and is unique to each handheld device. The emergency override is only used to override the system in case of a unit failure. The pin will be provided only after the control room has been contacted by management and has obtained the required permission,” Soares states.

“Once the truck is switched off again, the unit will require a sample to restart. On-site training will be undertaken with the operations team, management and drivers where the vehicles are based,” he adds.

The device is fully customisable to local legislation, or to a company’s policy. The units are also calibrated every six months to ensure accuracy and to meet legal requirements. It is important to ensure there are disposable mouthpieces to accompany the unit for hygiene purposes.

Soares notes: “The system can also be linked to the Sniper RX system – a video recording

Taking a deep breath for driver safety

Written by Mariska Morris

Thursday, 23 November 2017 13:00

system with live view – to establish that the correct person gave the sample and is driving the vehicle.”

“Alco-Safe has found the single most dependable and effective stance has proved to be creating a culture of safety within an organisation where no drugs are allowed and any level above a reading of zero blood alcohol is too high – also known as a zero-tolerance approach,” Evans concludes.