

Roll Over Protective Structures Saves Lives

By Jim Carrabba

Tractor overturns are still the main cause of fatalities on farms today. Data from the National Institute for Occupational Safety and Health (NIOSH) suggests there are approximately 250 tractor overturn fatalities per year. It is estimated that one out of every ten tractor operators will experience a tractor overturn in their lifetime. According to NIOSH, there are 4.7 million tractors on U.S. farms and about half of them do not have roll over protective structures (ROPS). ROPS are sturdy frames placed on tractors or built into the frame of tractor cabs. The ROPS protects the operator from being crushed if the tractor should overturn. In order for the ROPS to be effective the tractor operator must wear the seatbelt. If the operator does not wear the seatbelt, they risk being thrown from the protective zone of the ROPS and being crushed by the overturning tractor. The use of ROPS and a seatbelt is estimated to be 99 percent effective in preventing the death of an operator involved in a tractor overturn.

In 1967, ROPS first became available as optional equipment on most tractor models. Due to the additional cost, few farmers decided to purchase the ROPS option. The Occupational Safety and Health Administration (OSHA) created a standard in 1976 that requires ROPS on all tractors used by farm employees. This standard has not had much impact because farm owners, family members, and farms with 10 or less employees are exempt from enforcement of this standard. In 1986, tractor manufacturers began to add ROPS to all tractors over 20 horsepower. One of the reasons that there are still so many non-ROPS equipped tractors in use is that tractors are often in service for 30 to 40 years. Many of the tractors being used today were produced before ROPS became a standard item on tractors. Also, there are some farmers who have removed the ROPS on their tractors because they had to operate in areas of low clearance or they felt that the ROPS obstructed their view. A fold down ROPS for tractors that need to be used in areas of low clearance is available.

Most tractors manufactured since 1967 can be retrofitted with a ROPS. Farm equipment dealers can be a good source of information about whether a retrofit ROPS is available for your tractor. In many cases, tractor manufacturers offer a retrofit ROPS at cost because they know it can save lives. The National Farm Medicine Center in Marshfield, Wisconsin has created a publication called, "A Guide to Agricultural Tractor Rollover Protection." This publication is also available on the web at <http://research.marshfieldclinic.org/nfmc/resources/rops/>. This guide can be helpful in determining if ROPS is available for your particular tractor. It is important that you purchase ROPS that are designed and certified for that specific tractor. It is not recommended to use a homemade ROPS because they may not be properly designed, built or installed, and can expose the tractor owner and builder of the ROPS to liability damages should an overturn occur and the ROPS fail. When you are replacing older, non-ROPS equipped tractors, purchase tractors that already have a certified ROPS installed.

Remember, the ROPS will not prevent an overturn from occurring. However, a ROPS and seatbelt will save your life in the event your tractor does rollover. Please note that this year, NYCAMH is offering on-farm safety surveys and worker safety trainings at no cost to the farm. Our areas of focus include mechanical, farmstead, and personal protection safety and we offer bilingual trainings and materials for Spanish speaking workers. If you want more information on ROPS or these services, please contact me at 800-343-7527, ext 239 or e-mail me at jcarrabba@nycamh.com. NYCAMH, a program of Bassett Healthcare Network, is enhancing agricultural and rural health by preventing and treating occupational injury and illness.