

Press Release

Road accidents with tractors: main problem is older machinery

Accident risk in the EU rises with age of machine

Brussels, 17 July 2015 – The majority of accidents with tractors on public roads in Europe seem to involve older machines: using statistical evidence from the CARE database for seven EU Member States¹, 56% of all road accidents with tractors resulting in injury (and 69% of all road accidents with fatal injuries) happen with tractors which have been in use for more than 12 years.

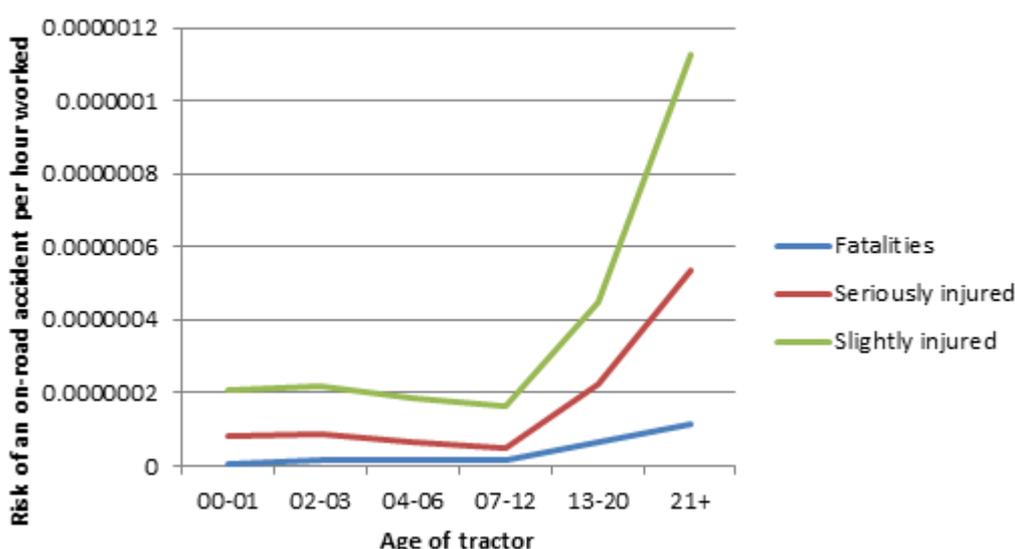
By contrast, the average risk of becoming involved in an on-road accident appears to be considerably lower for new machines. Considering, in addition, that new tractors are, on average, used a lot more intensely than older equipment, the effective on-road accident risk for tractors which have been in use for less than 13 years actually is 82% lower per hour worked when compared to older machines.

These findings seem to give proof to the considerable advances in active and passive road safety that have been implemented in new tractor models in the past 12 years. In addition, the rise of accident risk that can be observed after 12 years of use could point towards a need to better address repair and maintenance needs in older machinery.

The findings are preliminary results from CEMA’s broader initiative to establish common, European-wide criteria for reporting accidents which involve agricultural machinery. They are based on data from CARE (Community Road Accident Database) which is administered by the European Commission and keeps track of all on-road accidents in the EU.

The graph below illustrates the risk of an on-road accident with a tractor per hour worked in correlation to the respective age of the machine:

Risk of a road accident and tractor age



¹ Austria, Finland, France, Germany, Italy, Spain, UK.

Explanatory note on the calculation method

The CARE database records accidents according to severity (fatality, seriously injured & slightly injured). It typically also records the age of the tractor involved in an accident, yet does not reveal any insights into the particular accident dynamics. Based on this data, an analysis of the number of on-road accidents with tractors was conducted and put in correlation to the age of the corresponding machine. Statistical evidence about the average use (in hours) of tractors according to their age and the percentage of tractors and their staying in use over time were taken from a JRC study calculating the impact of EU engine emissions legislation on the environment. Using sales data from the past years, the tractors on the market per age and the average hours used by tractors of a particular age were calculated. For this calculation, a conservative estimate was assumed (average lifetime of 24 years for a tractor). By combining all data, an indicative value for the average risk of an on-road accident per hour worked could be established.

About CARE (Community Road Accident Database)

CARE is the European centralised database on road accidents which result in death or injury across the EU. CARE provides Member States access to this central database which is hosted by the European Commission at the Luxembourg data centre. The CARE system is a powerful tool that makes it possible to identify and quantify road safety problems throughout Europe's roads. Users can evaluate the efficiency of road safety measures, determine the relevance of Community actions and as exchange studies.

About CEMA's accident database initiative

CEMA advocates the establishment of a single uniform template that will need to be filled in for each and every accident involving agricultural machinery in Europe based on a common CEN standard. The data collected will for the first time provide reliable statistical evidence. This, in turn, will help in the development of proposals for the reduction of such accidents and will allow to adapt EU legislation regarding the occupational and road safety of agricultural vehicles accordingly. Read more about this project: <http://www.cema-agri.org/publication/towards-european-accident-database-agricultural-vehicles-0>

About CEMA

CEMA (www.cema-agri.org) is the European association of agricultural machinery industry. The industry represented by CEMA includes 4,500 manufacturers of agricultural machinery. 135,000 persons directly work in this branch of business, 125,000 persons work indirectly in distribution and maintenance. The companies are mainly small and medium-sized manufacturers according to the EU definition and generated a total turnover of 26 billion euros in 2014.