

# Not just a rural occurrence: Farm Equipment-related Crashes October, 2014

# The problem

- Although approximately one-third of agricultural equipment-related crashes occur near towns, these crashes are thought to be a rural problem.
- Prior studies have not untangled the unique differences in farm equipment-related crashes by their proximity to town.
- Data from farm equipment-related crashes from nine Midwestern States, 2005-2008
- Crash zip codes were assigned as urban or rural (large, small or isolated) using Rural-Urban Commuting Codes
- Crash proximity to a town (miles) was estimated

### The findings

- 1. Almost one in three crashes occurred in an urban zip code. (Figure 1) 31.6% of crashes occurred in isolated rural zip codes, followed by 30.2% in urban, 19.6% in small rural and 18.7% in large rural zip codes.
- 2. Crashes in urban zip codes differed from those rural crashes.

  Urban crashes were more likely to involve at least two vehicles, occur within town or/city limits or within one mile of a town or city. Of interest, the time of year of the crash did not differ by urban or rural zip code.
- **3.** Crashes within rural zip codes differ. Compared to crashes in isolated rural zip codes, those in small and large rural zip codes were more likely to involve at least two vehicles, and occur within a city or town.

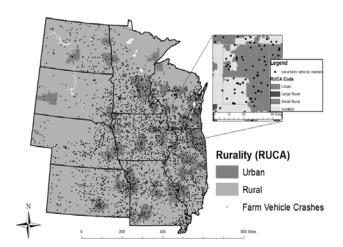


Figure 1. Locations of farm equipment-related crashes across 9 Midwestern States, by rurality, 2005-2008.

**4.** Even crashes occurring outside a town or city are occurring close to a town or city. (Figure 2) On average, crashes outside a town or city were 1.89 (urban zip codes) to 2.77 (isolated rural zip codes) miles from a town or city.

# Safety Tips

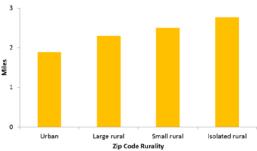
### All drivers:

 Be aware of farm equipment traveling on roadways, particularly when you are within two miles of a town or city.

# Farm equipment drivers:

 Farm equipment roadway users should display a slow moving vehicle (SMV) emblem on their equipment and remove dirt and grime before going on the roadway.

Figure 2. Among farm equipment-related crashes occurring outside a town or city, the mean distance, in miles, from crash site to a city/town, 9 Midwestern States, 2005-2008, N=3610



This analysis is supported by grant U50 OH007548-11 from the National Institute of Occupational Safety and Health for the Great Plains Center for Agricultural Health