

Two years ago, the TÜV Rheinland organisation presented a study of actual German traffic crash data showing up to 18% fewer fatal accidents as a result of the increased use of xenon headlamps. The study forecast that a full switch to xenon would prevent 1200 crashes on German roadways, and lower the nighttime traffic death toll by 18%. If these results remain valid when applied to Europe at large—and there's no reason to think they can't be—it would mean about 8,800 lives saved and 92,000 injury crashes prevented.

HMM, the Hannover Medical School, is publishing a study showing the positive effect of xenon headlampson safety. HMM has studied crashes from the GIDAS database involving cars equipped with halogen headlamps. Their analysis is based on dynamic reconstruction of real crashes and simulation of the situation if the cars involved had been equipped with xenon lamps instead. They analysed in detail 20 cases of the most frequent types of nighttime crash; the results show that 4 of those 20 crashes could have been completely avoided if only the cars involved had been equipped with Xenon headlamps, and 6 others partially because speed or alcohol were also involved (see details in our in-depth section). Clearly a positive safety effect of Xenon headlamps has been established.

The combination of these 2 studies, the first statistical and the second practical, prove that Xenon headlighting is a safety feature which saves lives and prevents injury and property damage. All of us in the lighting community are wise to remember that, and to promote high-performance lighting systems more fervently and persistently.