Knowledge retention surveys: identifying the effectiveness of a road safety education program in Dar es Salaam, Tanzania. K. Zimmerman,* J. Matagane,† T. Bishop,‡ A. Guerrero.‡ From *Amend, New York, NY, †Amend, Dar es Salaam, Tanzania, and ‡InterTrauma Medical Consulting, New York, NY

Background: Knowledge, attitude and belief surveys were implemented as part of a road safety education program in primary schools in Dar es Salaam, Tanzania. The purpose of this study was to quantify the effectiveness of the educational program and to identify how well the students were able to retain information 2 weeks later. Methods: The surveys were given at 5 of the 20 primary schools and were collected for all children in grade standard 3 (approximately 9–10 years old) and grade standard 7 (approximately 14–16 years old). The surveys were administered before the educational program, immediately after the program and 2 weeks later. During each stage of the survey, children were asked to complete the same 10 “true or false” questions about road traffic safety. Results: Road safety lessons were taught to a total of 66 629 children in 20 primary schools from Dec. 1, 2010, to Nov. 30, 2011. Of these, 1065 students were given the survey. Overall, the pupils answered 68.4% (CI 65.4%–71.1%) of the survey questions correctly before the lessons, and after the educational program correctly answered 85.0% (CI 82.9%–87.1%). The increase in knowledge, attitudes and beliefs demonstrated immediately after the educational program was sustained, as demonstrated by the students scoring, on average, 81.4% (CI 79.0%–83.7%) of the questions correctly 2 weeks later. This was similar for both grades tested. Conclusion: The findings of the survey demonstrate a noticeable improvement in students’ knowledge of road safety following the lessons. Conducting road safety lessons for students at select primary schools in Dar es Salaam, Tanzania, has proven to be worthwhile, as both levels of students surveyed demonstrated increased knowledge about road safety following the lessons and demonstrated sustained retention. The characteristics of the educational program are reviewed in detail. Road traffic injuries are a significant threat, especially for pedestrians who are a vulnerable group of road users. Children are often injured as pedestrians and have very different crash characteristics than adults, therefore it is beneficial to have tools tailored to their needs as road users. This study provides evidence that road safety education has the potential to be valuable in preventing injuries and deaths.