RISK FACTORS OF PEDESTRIANS’ INJURY IN GHANA

J Damsere-Derry*, B E Ebel, C Mock, F Afukaar, P Donkor  Correspondence: Building & Road Research Institute, Building & Road Research Institute UPO Box 40 Kumasi 233, Ghana

10.1136/ip.2010.029215.35

Introduction Dying on the road as a pedestrian is a serious health threat in developing countries. Pedestrian fatalities constitute over 60% of all urban road user deaths in Ghana.

Objective We estimated the OR associated with casualty fatalities using a multinomial logistic regression.

Results Crossing roadways in Ghana is inimical to pedestrians. Generally, over 70% of all pedestrian fatalities occurred during crossing the roads. Whereas fatalities in 2002 and 2003 were statistically indistinguishable from those of 2004 (p>0.05), in comparison with 2004, there were significantly fewer fatalities in 2005 and 2006 (adjusted OR 0.22, p=0.002; and 0.35, p=0.024 respectively). The probability that a pedestrian death occurring between 2002 and 2006 in Ghana is attributable to excessive speeding is 65%. The adjusted OR of pedestrian death associated with speeding compared with driver inattentiveness was 3.6 (95% CI 2.5 to 5.2). Generally, lighter vehicular masses were associated with low pedestrian fatalities. Compared with buses, pedestrians were less likely to die when struck by private cars (52%), pick-up trucks (57%) and motorcycles (86%). Night-time fatalities were notably higher than daytime deaths (adjusted OR 1.7, p=0.005).

Conclusions Important risk factors associated with pedestrian death in Ghana include being hit by heavy or speeding vehicles, night-time walking and roadside activities. Steps which may contribute to reducing pedestrian fatalities include measures to reduce vehicle speeds in settled areas, providing traffic medians, lighting streets in settlements and discouraging roadside activities such as hawking.