




## BP1: Training and Awareness

<b>Reference:</b> BP1 005 / BP3 001	<b>Title of Project:</b>	<b>Effect of enforcement of Italy's motorcycle helmet law on traumatic brain injuries</b>	
<b>Version:</b> 1	<b>Website:</b>	Article pdf document: <a href="http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1731012&amp;blobtype=pdf">http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1731012&amp;blobtype=pdf</a>	
<b>Brief Description of Project:</b>	<p>This research evaluates the introduction of a revised motorcycle helmet law in Italy during 2000. In this case study the effects of a media and enforcement campaign in the Romagna region are assessed.</p> <p>The revision required all motorcyclist and moped riders to wear a helmet. Prior to the change only those under the age of 18 were required to wear a helmet and this was largely ignored.</p> <p>The research identifies the resistance to helmet use amongst Italian PTW riders. This was more pronounced in Urban areas and more evident in the south (Rome 22.5%, Naples 3.4%).</p> <p>The focused media and enforcement campaign in the Romagna region resulted in a significant increase in helmet wearing rates and a reduction in traumatic brain injuries (TBI) amongst PTW riders.</p>		
<b>Monitoring Data:</b>	<b>Before</b>		<b>After</b>
	Correct use of helmet = 19.5%		Correct use of helmet = 97.5%

<p><b>Results:</b></p>	<p>An extract from the report is included below:</p> <p><b>Figure 1</b> TBI hospitalization rates before and after the revised Italian motorcycle-moped helmet law.</p>  <p>The bar chart displays the number of TBI admissions per 100,000 population per year. The y-axis ranges from 0 to 10. The 1999 bar is white and reaches the value 7. The 2000 bar is grey and reaches the value 2. A legend indicates 1999 is white and 2000 is grey. A text box next to the 2000 bar states 'Year 2000: -76%'.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>No of admissions/100 000 population/year</th> </tr> </thead> <tbody> <tr> <td>1999</td> <td>7</td> </tr> <tr> <td>2000</td> <td>2</td> </tr> </tbody> </table> <p><b>Results:</b> Helmet use increased from an average of less than 20% to over 96%. A comparison of TBI incidence in the Romagna region shows that there was no significant variation before and after introduction of the revised helmet law, except for TBI admissions for motorcycle-moped crashes where a 66% decrease was observed. In the same area TBI admissions by age group showed that motorcycle mopeds riders aged 14–60 years sustained significantly fewer TBIs. The rate of TBI admissions to neurosurgery decreased by over 31% and epidural hematomas almost completely disappeared in crash injured moped riders.</p>	Year	No of admissions/100 000 population/year	1999	7	2000	2
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1999	7						
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<p><b>Key Effective Conclusions:</b></p>	<p>The combination of Police enforcement and an effective education campaign appears to have resulted in a significant increase in helmet wearing and a measurable reduction in PTW rider head injuries.</p>						
<p><b>Projects for Comparison:</b></p>	<p>ACEM Wear and Lock Campaign (BP1 014 / BP3 006).</p>						
<p><b>Justification:</b></p>	<p>The project confirms the potential of a clear and encompassing helmet law supported by media and enforcement initiatives to reduce collision injuries. Although the Romagna region is partly rural, the collision impacts involved were close to average urban PTW speeds.</p> <p>Although non-compliance with helmet legislation is not an issue in some EU states, this approach appears to provide a best practice model for those where this remains a problem.</p> <p>This project addresses the eSUM objective for WP3, BP1 by offering the potential for reducing urban PTW casualties through rider training/behaviour change.</p>						