

**Can a combination of local, regional and national information substantially increase bicycle-helmet wearing and reduce injuries? Experiences from Sweden.**

Ekman R, Schelp L, Welander G, Svanström L. Accident Analysis and Prevention 1997;29:3,321-28.

**Abstract**

In Skaraborg County 90% of all preschool children now use bicycle helmets. For children under 15 there was an average annual decrease in all bicycle-related injuries of 3.1%, equivalent to a decrease of 48% over the study period, 1978-93; for head injuries, 59%. Sweden as a whole showed a reduction of 32% in bicycle-related injuries; head injuries, 43%.

Mean incidence, linear-regression parameter (b<sub>1</sub>) and 95% confidence intervals (c.i.) were analyzed for all bicycle-related head injuries leading to hospital in-patient care per 1,000 persons in Skaraborg county, 1978-1993, by age group, see table 5.

Table 5. Mean incidence, linear-regression parameter (b<sub>1</sub>) and 95% confidence intervals (c.i.) for all bicycle-related head injuries leading to hospital in-patient care per 1,000 persons in Skaraborg County, 1978-1993, by age group.

|                 | <b>Age<br/>0-14</b> | <b>15-24</b>       | <b>25-64</b>       | <b>65+</b>         |
|-----------------|---------------------|--------------------|--------------------|--------------------|
| Mean            | 1.09                | 0.37               | 0.24               | 0.36               |
| c.i.            | (0.94, 1.24)        | (0.29, 0.45)       | (0.21, 0.27)       | (0.30, 0.42)       |
| b <sub>1</sub>  | -0.0509             | -0.0015            | +0.0030            | +0.0121            |
| c.i.            | (-0.0657, -0.0362)  | (-0.0179, +0.0150) | (-0.0030, +0.0089) | (+0.0020, +0.0222) |
| Significant     | yes                 | no                 | no                 | yes                |
| % annual change | -3.4                | -0.4               | +1.4               | +4.7               |
| c.i.%           | (-4.3, -2.4)        | (-4.7, +3.9)       | (-1.4, +4.1)       | (+0.8, +8.6)       |

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