



>> WHY ARE STUDED TYRES SAFER?

- Studs reduce the braking distance on ice
- Studs improve the handling on slippery surfaces => friction improvement
- Studs roughen the ice and provide a better grip for the rubber and tread, especially for a tyre without studs.
- Studs extend critical handling limits
 - => Lateral slip can mean loss of control
 - => Side forces are very important
- Studs reduce the risk of the car spinning around

Results of Swedish investigations

The risk of an accident with studded tyres is lower in comparison with tyres without studs.

=> by 25% on roads outside of cities

=> by 20% in developed areas

References:

Publication VTI Meddelande 756, Project code: 30121, published 1995.

Socio-economic calculations by Arne Carlsson, Per Centrell and Gudrun Öberg.

Swedish Road and Transport.

Research Institute (VTI).

S-581 95 Linköping, Sweden

Results of Finnish investigations

Studded tyres reduce fatal accidents during the entire winter period.

=> by 48% on ice

=> by 20% on snow

References:

Alppivuori Kari, Leppänen Anne, Anila Matti, Mäkelä Kari.

Road Traffic in Winter.

Summary of publications in the research programme.

Finnra Reports 57/1995.

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