

# Relative Risk of Disease and Injuries for Different Age Groups of Travellers.

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## Object

The exact numbers of travellers in different age groups travelling abroad are difficult to obtain. We used vaccinees in the year 2007 at a centre for travel medicine in Oslo as a proxy-parameter representing the age distribution of the travelling population, and related this distribution to statistics on people seeking help from the Euro-Alarm emergency centre in Copenhagen in that same year. This enabled us to estimate relative risk for different age groups.

## Material and methods

Europeiske Travel Insurance registered 28 600 disease cases in 2007. Of these, about 2500 were considered serious. Only 337 serious incidents were included in this study, because these were the only cases on which complete data were recorded, and because they were from countries where travel vaccines are recommended. There is no known bias in this selection, except that the incidents were serious.

The age distribution of three different incident types in this material was divided by the age distribution of 965 pre-travel clients. Relative risks were calculated using the 30-39 years age group as a reference.

## Results

For children aged < 5 years the risk of contracting an infection during travel is six times that of the reference group. Travellers aged 50 years and over are over-represented in the figures for injuries with more than twice the risk for those under 50. As regards medical, neurological and surgical disease not directly related to travel, the risk for subjects of 40-59 years is more than three times as high and for the >59 age group more than five times as high as that of the reference group.

In the < 1 year age group, 9 required help for infections, compared to 7 children <1 year in the vaccinee group of 965, i.e. the numbers are too small to permit any meaningful estimate of relative risk (which would be 18 times that of the reference group). Nevertheless this indicates that children aged <1 year are vastly over-represented in terms of infections.

## Conclusions

Our findings suggest that the public should be advised against taking children under five years of age to exotic travel destinations, except where unavoidable. Having said this, no Norwegian child has died while travelling abroad since the tsunami in Thailand in 2004.

