# A Model for Analyzing the Impact

# of Selective Lapsation on Mortality

by

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## ABSTRACT

This paper presents a model for examining the effect of various relationships between mortality rates and lapse rates on the mortality experience of a cohort of insured lives. It takes an individual approach rather than the aggregate approach used in traditional methods of analyzing selective lapsation. The model assumes that insured lives are healthy at policy issue, but may later move to an impaired state from which the lapse rate is zero. Associated with each insured is an unobservable 'risk level' random variable, which reflects the heterogeneity of the insured group. Individual mortality and lapse rates are functions of the risk level. A numerical illustration provides some interesting results obtained using this model.

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