

ENVIRONMENTAL RISK STATIFICATION OF CENSORED DATA USING A WEIBULL PROPORTIONAL-HAZARDS MODEL

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Abstract: Although commonly used to assess environmental disease risk, adjusted survival estimates generated from a Cox proportional-hazards model often deviate significantly from their true values with increasing time from exposure. In this presentation, we present a family of survival models based on the generalized Weibull distribution for performing environmental risk stratification of censored data. Estimates are compared with traditional models for goodness of fit and Harrell's c-statistic.

Key Words: Environmental risk exposure, event-time models, generalized Weibull distribution