



## RMS Excess Mortality Solutions

RMS facilitates the assessment of mortality and injury risk by modeling the processes and probabilities of events that drive extremes of mass casualty, such as epidemics, natural catastrophes, and terrorist attacks.

RMS solutions enable insurers to analyze excess mortality risk, catastrophe life risk, and accumulation risk for a wide range of life and health insurance coverages, including:

- Workers compensation
- Accidental death and dismemberment
- Life insurance
- Health care insurance
- Personal accident

### Excess Mortality and Injury Catastrophe Risk

RMS catastrophe modeling for life and health risks deploys the proven techniques of stochastic event-driven analytics developed by RMS to provide solutions for assessing the consequences and likelihood of extreme events that cause human injury.

- Assess capital adequacy to meet shock stresses of different magnitude
- Quantify the need and expected loss of different risk transfer options
- Securitize risks in excess mortality bonds
- Manage accumulations of risks in clusters of corporate exposure such as group life insurance and workers compensation portfolios

### Infectious Disease

The RMS<sup>®</sup> Infectious Disease Model assesses pandemic influenza and other emerging infectious disease risk. The model quantifies the mortality and morbidity of different subgroups of the population likely to be found in insurance portfolios.

### Terrorism Risk

RMS terrorism risk solutions assess the capabilities of different threat groups that could inflict mass casualty attacks and replicate the targeting patterns, modus operandi, and likely attack modes of the antagonists. Detailed loss modeling of potential terrorist attacks provides the potential severity and number of deaths and injuries that could be inflicted on a population. Terrorism risk solutions include scenario and probabilistic terrorism risk models.

### Earthquake Casualty Risk

The RMS<sup>®</sup> United States Earthquake Workers Compensation Model and RMS<sup>®</sup> Japan Earthquake Casualty Model assess mortality risk based on the detailed modeling of seismic hazard source zones, their likelihood of generating large-magnitude earthquakes, the resilience of the building stock to the shaking, and the patterns of death and injury from all perils in a major seismic event.