

Rhineland-Palatinate Mortality Monitoring

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In cooperation with the Statistical Office Rhineland-Palatinate, we implement epidemiological surveillance during the COVID19 pandemic by continuously monitoring excess mortality. To this end, we analyze county-specific monthly all-cause mortality and visualize results in an interactive online dashboard. The dashboard allows to explore regional and time patterns of mortality in RLP based on age-standardized rates and standardized mortality ratios relative to earlier years. In addition, excess mortality is estimated as the difference of observed and predicted mortality from a Bayesian negative binomial statistical regression model that takes into account seasonal trends as well as county-specific information on demographics (population by age group and sex), weather, Influenza activity, and regional deprivation. Uncertainty in model estimates and predictions is derived from the posterior predictive distribution. Data and statistical analyses are updated in monthly intervals.