Longevity bonds are vehicles for the transfer of longevity risk associated with life annuity portfolios. This paper studies the specification and pricing of these securities. A stochastic model for mortality is developed that parsimoniously incorporates changes in the rate of death across both age and time. The model is used to examine the impact of a variety of tranche structures on the risk profile of the products offered to investors. They are then priced under a risk neutral pricing measure and considered in the context of recent insurance linked securitisations.