

Suggested Value of a Statistical Life in RISs and LIAs

This section provides guidance to departments on a suggested default value of a statistical life to use in cost-benefit analysis for RISs and LIAs. The concept is particularly relevant to regulatory proposals designed to reduce the risk of death, injury or illness.

The value of a statistical life refers to the benefits derived from reducing risk of a death that is experienced by a population. The term 'statistical' is used to describe an *ex-ante*, anonymous individual, and the concept does *not* imply that an individual life is a market good.

Valuing a statistical life is a way of formalising and understanding implicit trade-offs. In a policy context, scarce resources must be allocated across a wide variety of issues, and a value for a statistical life is a useful tool for comparing different types of benefits and costs in order to produce better outcomes for society. Trade-offs may include a choice between two initiatives with varying safety implications; a project that saves a life versus a project that produces environmental benefits; or a regulation that saves lives versus improving travel times.

Providing a default value of a statistical life can provide guidance and support for regulatory agencies using this in cost-benefit analysis. To the extent that providing a default value of a statistical life promotes use of a consistent value across all regulatory proposals, it allows:

- 1. regulatory proposals to be dealt with consistently across a range of issues;
- 2. the total costs and benefits of different proposals to be compared; and
- 3. more time to be devoted in RIS/LIA analysis on the expected *number of lives saved*, rather than the value of a life.

The Commonwealth Office of Best Practice Regulation has published guidance on the value of a statistical life. The link to this guidance is

<u>https://www.dpmc.gov.au/deregulation/obpr/docs/ValuingStatisticalLife.pdf</u>. The guidance is based on work done by Abelson in 2007, available here:

https://www.dpmc.gov.au/sites/default/files/publications/Working paper 2 Peter Abelso n.pdf.

Abelson's figures should be indexed to the relevant year. Indexed to 2016 dollars (using all groups CPI from June 2007 to June 2016), the estimated value of a statistical life year is around \$186,985. Assuming a person has 40 years of life left, and using a discount rate of 3 per cent, the estimated value of a statistical life is around \$4.3 million.

This value is an 'average' and does not take into account any particular risk preferences, health characteristics, background, age or socio-economic status. It may be that for a particular proposal, a Department or agency does not consider this 'average' to be appropriate. In this case, if desired, another value can be used, provided that the RIS or LIA provides a clear explanation as to why the alternative value is appropriate, and that sensitivity analysis is conducted using the 'average' value.

As with any key empirical assumption, a sensitivity analysis should be undertaken on the value used.