

Table of Contents

Executive summary	7
Introduction	9
Children's health and the environment	10
Elicitation of children's preferences	13
Household allocation models	16
Valuation methodologies	19
Difficulties related to age, latency and discounting	24
Outline of the book	27
Chapter 1. Overview of the Risk Differences between Children and Adults.....	37
Introduction.....	38
The nature of the age-related differences in susceptibility and exposure:	
Underlying mechanisms and influencing factors.....	38
Risk differences between children and adults with respect to some environmental pollutants	45
Implications for the risk assessment process	59
Summary points	64
Chapter 2. Valuation Differences between Adults and Children.....	79
Introduction: Why should we pay attention to children?	80
Sources of differences in valuation.....	82
Overview of the methodologies used to value children's health	91
Review of the literature on valuation differences	98
General discussion	101
Annex 2.A. Review of the literature on the valuation of children's health.	111
Chapter 3. Valuing Children's Health: Parental Perspectives.....	121
Introduction.....	122
Theoretical Foundations of the Parental Perspective	123
Difficulties Hindering the Use of Parental Preferences to Estimate Social Benefits.....	126
Empirical Applications of the Parental Perspective.....	127
A Model of Perceived Morbidity and Mortality Risks in the Family	132
Sampling, Survey Methods and Data.....	136
Empirical Results	141
Conclusions.....	143
Annex 3.A. Supporting Tables.....	151

Chapter 4. Transferring Measures of Adult Health Benefits to Children	159
Introduction.....	160
General Issues	162
Estimates of adult-child relative health benefits	169
Using an intrahousehold allocation model to estimate	173
Conclusions.....	175
Annex 4.A. Parental Marginal Rates of Substitution between Own and Child Health.....	179
Chapter 5. Discounting of Children's Health: Conceptual and Practical Difficulties	187
Introduction.....	188
Discounting practices in the economic evaluation of health.....	188
Difficulties for discounting health	189
Valuation of children's health.....	193
Empirical treatment of discounting problems.....	198
Conclusion	201
Chapter 6. Economic Uncertainties in Valuing Reductions in Children's Environmental Health Risks	207
What Is "Economic Uncertainty"?.....	208
Identifying Sources of Economic Uncertainty	209
Are Economic Uncertainties Captured by Standard Health Valuation Measures?.....	219
Conclusions.....	227
Chapter 7. Willingness to Pay and Quality-Adjusted Life Years	239
Introduction.....	240
Children and Adults: Whose Preferences?	240
Utility-Theoretic Foundations.....	243
Valuing Mortality Risk	247
Methods for Estimating Values	252
Aggregation of Health Risks.....	258
Conclusions.....	259
Annex 7.A. Supporting Data.....	269
Chapter 8. Methods for Valuing Health Losses and Health Gains in Children	273
Background.....	274
Aim of paper	274
Quantification as valuation	275
Basic methodological issues in valuing health states.....	276
Multi-attribute utility instruments	279
MAU-instruments in children	282
Summary and conclusion	287
Annex 8.A. Health State Utilities and Corresponding Societal Values	292
Annex 8.B. The 17D Questionnaire ©.....	293
Chapter 9. Methodological Issues and Policy Implications	303
Methodological Issues	304
Policy Implications	306